

Top 10 Advanced Materials & Technologies Market by Product (G. Fast Chipset, Quantum Dots, Flexible Battery, Graphene, 3D IC & 2.5D IC Packaging, Organic Electronics, Smart Glass, Others) - Global Forecast to 2021

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Abstracts

The top 10 advanced materials & technologies in electronics refers to the new or modifications to the existing materials & technologies to obtain superior performance or efficiency. The market includes high growth materials & technologies in the electronics domains such as G. fast chipset, quantum dots, graphene, 3D IC & 2.5D IC packaging, organic electronics, flexible battery, carbon nanotubes, biochip, silicon carbide in semiconductor, and smart glass. The market is witnessing high growth owing to the increasing end-use applications, technological advances, and the high demand for these technologies from both developed and emerging regions.

"3D IC & 2.5D IC Packaging technology to grow at a CAGR of 40.7% CAGR from 2016 to 2021"

3D IC & 2.5D IC packaging is a kind of chip with multiple layers of silicon wafer stalked together, along with electronic components using through-silicon vias (TSVs). Increasing demand for high-performance and low power consumption components are likely to fuel the growth of this market in the coming years. The main driver for the 3D IC and 2.5D IC packaging market is increasing trend of miniaturization of electronic devices.

"Graphene is projected to grow at a CAGR of 42.8% from 2016 to 2021"

The global graphene market is expected to register a growth of 42.8% in terms of value



from 2016 to 2021. The demand of graphene has experienced an exponential growth over the recent years, due to its broad array of unique properties and environmental friendly approach. Moreover, graphene is used in various industrial and commercial applications such as composites, coatings, and energy among others owing to its tensile strength, flexibility, and non-toxicity nature which further strengthen the market for graphene.

"Silicon Carbide in Semiconductor is anticipated to grow at a CAGR of 42.8% during the forecast period"

The Silicon Carbide (SiC) in semiconductor devices market is experiencing radical changes because of the technological developments. The demand for SiC in semiconductor will be supported by its superior properties such as hardness, strength, shock resistance, and thermal conductivity, ability to perform in power and frequency.

In the process of determining and verifying the market size for the several segments and subsegments of each product gathered through secondary research, extensive primary interviews were conducted as follows:

By Company Type: Tier 1 (31%), Tier 2 (49%), and Tier 3 (20%).

By Designation: C-level (44%), Director Level (21%), and Others (35%)

By Region: Asia-Pacific (32%), North America (22%), Europe (27%), and RoW (19%).

Note: Others include sales, marketing, and product managers.

RoW includes South America and Middle East & Africa

The tiers of the companies are decided on the basis of revenues and ownership.

Various key players profiled in the report includes, Broadcom Ltd. (U.S.), Sckipio Technologies SI Ltd. (Israel), QD Vision Inc. (U.S.), Nanosys Inc. (U.S.), Samsung Electronics Co., Ltd. (South Korea), STMicroelectronics N.V. (Switzerland), Graphene NanoChem Plc (Malaysia), CVD Equipment Corporation (U.S.), Renesas Electronics Corporation (Japan), Toshiba Corporation (Japan), TSMC Ltd. (Taiwan), Universal Display Corporation (U.S.), BASF SE (Germany), Arkema S.A. (France), Hanwha



Chemical Co. Ltd (Korea), and others.

Research Coverage:

The report segments the market on the basis of each advanced material & technologies in electronics domain. Each of these products is further segments into various micro markets such as application, end-use industry, technology, and material. The market is also segmented on the basis of regions, namely, Asia-Pacific, Europe, North America, and RoW.

Reasons to buy this report:

This research report is focused on various levels of analyses—industry analysis (industry trends), and company profiles of top two players for each advanced material & technology, emerging and high-growth segments of the each advanced material & technology; high-growth regions; and market drivers, restraints, and opportunities.

The report provides insights on the following pointers:

Market Penetration: Comprehensive information on advanced materials & technologies offered by the top players in the global market

Market Development: Comprehensive information about lucrative emerging markets – the report analyzes the markets for advanced materials & technologies in electronics across regions

Market Diversification: Exhaustive information about new products, untapped geographies, recent developments, and investments in each advanced materials & technologies in electronics market

Competitive Assessment: In-depth assessment of strategies, products, and recent developments of the two leading players in the advanced materials & technologies in electronics market



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- *Details might not be captured in case of unlisted companies.

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^{*}Details might not be captured in case of unlisted companies.



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^{*}Details might not be captured in case of unlisted companies.



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^{*}Details might not be captured in case of unlisted companies.



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^{*}Details might not be captured in case of unlisted companies.



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