

# **Printed Circuit Boards: Technologies and Global Markets**

Market Research Report | 2022-09-08 | 148 pages | BCC Research

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## Report description:

Description

Report Scope:

The market scope is defined through consideration of PCB assembly technologies, types, PCB materials, end-user applications, and regions. PCB assembly technologies covered in the report include surface-mount and through-hole technology. The various types of PCBs covered in this report are high-density interconnects (HDI) PCBs, which further cover microvia and every layer of interconnecting PCBs; flexible PCBs are further categorized into single-sided, double-sided, and multilayer flex PCBs; multilayer rigid PCBs; and other PCB types include single-sided, double-sided, and rigid-flex PCBs.

This report highlights different PCB materials, including FR-4, CEM-3, polymide, polytetrafluoroethylene (PTFE), and others. Moreover, the report also provides an analysis of PCB materials by PCB types. The report also focuses on various end-user applications for PCBs, which include networking devices; healthcare; defense, surveillance, and aviation; energy; consumer electronics; computing and storage; industrial; automotive and transportation; retail; and others. In addition, the report also offers a major regional analysis of North America, Europe, Asia-Pacific, and the Rest of the World. The estimated and forecast market revenue and volume of each region are considered in this report. Moreover, the report also provides the average prices for PCBs by end-user applications.

This report also offers insights on drivers, restraints, and opportunities for the market, which were gathered through primary and secondary research. The report also covers COVID-19 impact as it had a massive impact on society since 2020. Also, the strategies adopted by companies in the PCB market are provided so readers can analyze ongoing trends in the market.

Report Includes:

- 41 data tables and 37 additional tables
- An up-to-date overview and analysis of the global markets for printed circuit boards (PCBs) and related electronics manufacturing technologies
- Analyses of the global market trends, with market revenue data for 2021, estimates for 2022 and 2023, and projections of compound annual growth rates (CAGRs) through 2027
- Highlights of the market potential for printed circuit boards, industry growth drivers, and areas of focus to forecast the global PCB market into various segments and sub-segments
- Assessment of the underlying technological, environmental, legal/regulatory, and political trends that may influence the size and nature of the market
- Estimation of the actual market size and market forecast for printed circuit board, and corresponding market share analysis based on type, assembly technology, material, end-use application, and region
- Latest information on growth driving factors and opportunities in the consumer electronics industry, industry shifts and regulations, and other demographic and regional factors that will influence this market demand in the coming years (2022-2027)
- Identification of the companies that are best positioned to meet this demand because of their proprietary technologies, strategic alliances, or other advantages
- Market assessment of the COVID-19 impact on the global PCB industry, along with its implications on demand and supply, price impact and various government strategic decisions
- Descriptive company profiles of the leading global players, including Advanced Circuits, CMK Corp., Meiko Electronics Co. Ltd., Nok Corp., Samsung Electro-Mechanics and TTM Technologies

#### **Executive Summary**

#### Summary:

A printed circuit board (PCB) is an electronic assembly that uses copper conductors to create electrical connections between components. Printed circuit boards provide mechanical support forelectronic components so that a device can be mounted in an enclosure. A printed circuit board designmust include a specific set of steps that aligns with the manufacturing process, integrated circuit packaging, and the structure of the bare circuit board. Printed circuit board design has grown into its own vertical within the electronics industry.

The global market for PCBswas estimated to be REDACTED in 2021. It is projected the PCBsmarketwill grow at a CAGRof REDACTED and is forecast to reach REDACTED by 2027. The growth in driverless vehicles in the automotive sector, IoT, and electronics, and Asia-Pacific's rising production of electronic devices and accessories, are the major drivers for the PCBsmarket. Apart fromdrivers and restraints, growth in nano-electronics devices andwidespread usage of 5G technologywill create huge opportunities for vendors in the market.

In this report, the global market for PCBs is segmented into assembly technology, type,material, enduser application, and geography. Based on assembly technology, the PCBsmarket has been categorized into surface-mount technology and through-hole technology. Surface-mount technology is currently dominating the market and was valued at REDACTED in 2021. It is estimated that surface-mount technologywill grow at a CAGRof REDACTED and is forecast to reach REDACTED by 2027.

Based on type, the global market for PCBs is segmented into high-density interconnect (HDI), flexible, multilayer, and others.

Based on material, the PCBmarket has been segmented into FR-4, CEM-3, polymide, polytetrafluoroethylene (PTFE), and others.

Based on end-user application, the PCBmarket has been segmented into networking devices; healthcare; defense, surveillance, and aviation; energy; consumer electronics; computing and storage; industrial; automotive and transportation; retail; and others.

By geography, the global market for PCBs has been segmented into North America, Europe, Asia-Pacific, and RoW. The Asia-Pacific

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region currently is the most dominantmarket for PCBs. In 2021, total revenue from the Asia-Pacific PCBs market reached REDACTED, which is around REDACTED of the global market. The presence of leading global companies, robust technology infrastructure, favorable political and economic environments, surging demand for smartwearables, and strong adoption of advanced technologies such as AI, IoT, and the cloud are some of the key factors driving the Asia-Pacific market. The Asia-Pacific is also currently the fastest growing market for PCBs globally.

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ADVANCED CIRCUITS

AGY

AT&S

CMK CORP.

COHU INC.

**COMPEQ** 

DYNAMIC ELECTRONICS CO. LTD.

13 ELECTRONICS INC.

MEIKO ELECTRONICS CO. LTD.

NAN YA PCB CORP.

NOK CORP.

SAMSUNG ELECTRO-MECHANICS

SANMINA CORP.

SHENGYI TECHNOLOGY CO. LTD.

SHINKO ELECTRIC INDUSTRIES CO. LTD.

SUMITOMO ELECTRIC INDUSTRIES LTD.

TRIPOD TECHNOLOGY CORP.

TTM TECHNOLOGIES

UNIMICRON TECHNOLOGY CORP.

ZHEN DING TECHNOLOGY HOLDING LTD.

Chapter 11 Appendix: List of Acronyms



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