

## North America Printed Circuit Board Market Forecast 2024-2032

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## Report description:

#### **KEY FINDINGS**

The North America printed circuit board market is anticipated to register a CAGR of 2.98% during the forecasted years of 2024 to 2032. The printed circuit boards (PCBs) market in North America has been rapidly evolving and expanding, driven by the growing demand for smart devices, advancements in electronic utility, and increased internet penetration.

## MARKET INSIGHTS

PCBs are integral components across various sectors, including communications, consumer electronics, computing, military, industrial electronics, and automotive applications. They serve as the foundational platform for deploying circuits and provide electrical connectivity for all components mounted on the board.

The escalating demand for PCBs is particularly notable among manufacturers of electronic devices such as smartphones, rechargeable batteries, and LED and LCD screens. Accordingly, this surge is especially pronounced in North America, where PCBs used in military and aerospace applications represent a significant portion of the market share.

## **REGIONAL ANALYSIS**

The North America printed circuit board market growth assessment includes the evaluation of the United States and Canada. The United States PCB market holds significant potential for expansion and development, bolstered by the presence of prominent multinational organizations such as TTM Technologies, Multek, HTD Group, Advanced Circuits, and Dongguan HRSC PCB, among others. The market's growth is further supported by initiatives aimed at addressing electronic waste (e-waste).

Aligning with this, the Environmental Protection Agency (EPA) of the United States, in collaboration with the United Nations

University for the Solving the E-waste Problem Initiatives (UNU-Step), is actively working to tackle e-waste issues in developing countries. It also supports the US Government's National Strategy for Electronics Stewardship, which outlines plans to enhance electronics management throughout their lifecycle. Despite its critical importance, e-waste management poses significant challenges due to the toxic chemicals in electronic equipment. In fact, substances such as mercury, lead, cadmium, and arsenic frequently leach into the environment, posing severe risks to human health and ecosystems, as per the EPA.

On the other hand, the robust deployment of PCBs in consumer electronics-particularly smartphones, PCs, and tablets-is driving market growth in the United States. As of August 2023, in the second quarter, approximately 5.861 million Chromebooks were sold, reflecting a 1.2% year-on-year growth. HP experienced an increase of 69.2%, with 1.56 million units sold, while Lenovo saw a 14.5% rise, reaching 1.34 million units. This resurgence in Chromebook sales was primarily driven by robust demand in the United States education sector. The rising demand for computers in K-12 education is further prompting manufacturers to scale up

production of computers and desktop systems, thus boosting PCB demand.

According to industry statistics, 95% of Americans aged 18 to 29 years owned a smartphone as of March 2024, indicating a significant increase from 35% in 2011. Furthermore, the growing adoption of smart surveillance cameras is also contributing to the demand for PCBs. Consumers are transitioning from traditional mountable Wi-Fi cameras to advanced smart home security cameras to enhance the security of their premises, thus highlighting the increasing importance of PCBs in modern security infrastructure. In turn, these factors are collectively expected to contribute to the significant growth of the North America printed circuit board market over the forecast period.

#### **SEGMENTATION ANALYSIS**

The North America printed circuit board market is segmented into raw material, substrate, and application. The application segment includes communications, consumer electronics, industrial electronics, automotive, military, and other applications. In the communication segment, PCBs are integral to a wide range of digital devices within communication networks, including mobile phones, switching systems, power distribution systems, networking equipment, routers, and amplifiers. PCBs play a crucial role by providing the electrical connections between all electronic components and serving as the foundational base for integrating the entire system.

In mobile devices, PCBs can be broadly categorized into two main sections: network and power. The network section includes components such as the antenna point, antenna switch, and network ICs (integrated circuits), while the power section encompasses components like the power ICs, CPU, and Flash ICs. These sections work together to ensure the effective operation and integration of mobile communication systems.

## **COMPETITIVE INSIGHTS**

Some of the leading companies operating in the North America printed circuit board market include Tripod Technology Corporation, TTM Technologies, Unimicron Technology Corp, etc.

TTM Technologies, headquartered in the United States, is a leading global provider of printed circuit boards (PCBs) and backplane assemblies, which are essential components in electronic products. It operates primarily in the US and China.

TTM Technologies serves a diverse range of customers, including original equipment manufacturers (OEMs) and electronic manufacturing services (EMS) providers. Its clientele spans various sectors, such as networking and communications infrastructure, smartphones, touchscreen tablets, aerospace and defense, high-end computing, and industrial and medical industries. Additionally, the company operates through 28 specialized facilities across the US and China.

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