

Flexible Electronics Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2023-2028

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Abstracts

The global flexible electronics market size reached US\$ 28.3 Billion in 2022. Looking forward, IMARC Group expects the market to reach US\$ 44.4 Billion by 2028, exhibiting a growth rate (CAGR) of 7.3% during 2023-2028.

Flexible electronics, or flex circuits, refer to various electronic devices that are mounted on stretchable or conformable substrates, such as plastic, metal foil, paper and flex glass. These devices are bendable, twistable and stretchable, and can be incorporated into various consumer and industrial products. These devices are commonly used in smartphones, health tracking tools, security tags, automotive sensors and strain gauges in civil constructions.

The significant growth in the consumer electronics sector is one of the key factors driving the growth of the market. Furthermore, growing consumer preference for wearable devices is also creating a positive outlook for the market. Smartphones, tablets, watches and televisions are being manufactured using flexible display panels to enhance their aesthetic appeal, portability and durability. Additionally, widespread product adoption in the healthcare industry is also providing a boost to the market growth. Flexible biomedical devices can be implanted on the patient's skin for analyzing biomechanical movements, biological signals and vital signs accurately, along with improving sensations in robotic arms and prosthetic hands. Moreover, product integration with the Internet of Things (IoT) and artificial intelligence (AI) is acting as another growth-inducing factor. These devices are implanted as smart fabric sensors in helmets, seats, gloves, shoes, clothing materials and steering wheels for collection of data in real-time. Other factors, including the development of innovative, lightweight, ultra-thin and foldable variants, which are commonly used in hybrid system-in-foil (SiF)



and photovoltaic (PV) system installations for solar power, are projected to drive the market further.

Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global flexible electronics market report, along with forecasts at the global, regional and country level from 2023-2028. Our report has categorized the market based on application, circuit structure type and vertical.

Breakup by Application:

Displays

LCD Displays

OLED Displays

Thin-Film Photovoltaics (PV)

CdTe

CIGS

a-Si

Printed Sensors

Biosensors

Image sensors

Touch Sensors

Pressure Sensors

Temperature Sensors

Gas Sensors

Humidity Sensors

Batteries

Thin-Film Batteries

Curved Batteries

Printed Batteries

Others

OLED Lighting

Others

Breakup by Circuit Structure Type:

Single-Sided Flexible Circuit
Double-Sided Flexible Circuit
Multilayer Flexible Circuit



Sculptured Flexible Circuit Others

Breakup by Vertical:

Consumer Electronics

Energy & Power

Healthcare

Automotive

Military and Defense

Aerospace

Others

Breakup by Region:

North America

United States

Canada

Asia Pacific

China

Japan

India

South Korea

Australia

Indonesia

Others

Europe

Germany

France

United Kingdom

Italy

Spain

Russia

Others

Latin America

Brazil

Mexico

Others

Middle East and Africa



Competitive Landscape:

The competitive landscape of the industry has also been examined with some of the key players being 3M, E Ink Holdings, Konica Minolta, LG Group, Multi-Fineline Electronix, Panasonic, Pragmatic Printing, Samsung Group, etc.

Key Questions Answered in This Report:

How has the global flexible electronics market performed so far and how will it perform in the coming years?

What has been the impact of COVID-19 on the global flexible electronics market?

What are the key regional markets?

What is the breakup of the market based on the application?

What is the breakup of the market based on the circuit structure type?

What is the breakup of the market based on the vertical?

What are the various stages in the value chain of the industry?

What are the key driving factors and challenges in the industry?

What is the structure of the global flexible electronics market and who are the key players?

What is the degree of competition in the industry?



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