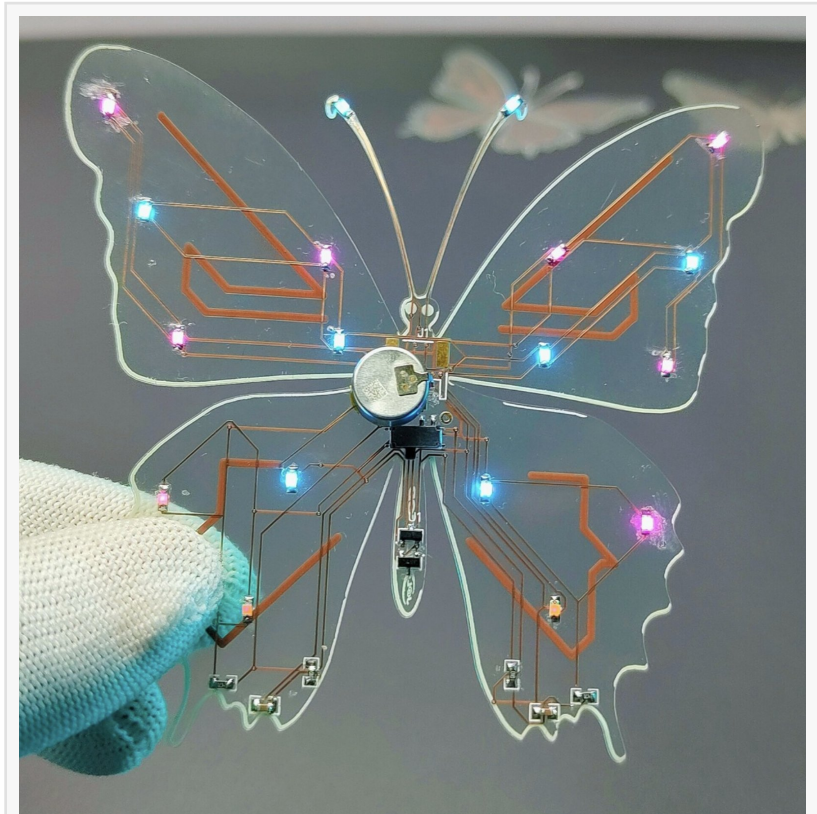


# Transparent PCB by JLCPCB Enable Breakthroughs in Medical Devices and Consumer Electronics

*This article explores the breakthrough features, advantages, applications, and reasons behind the widespread acclaim of JLCPCB's FPC products.*

KREFELD, GERMANY, August 12, 2025 /EINPresswire.com/ -- On May 8, 2025, JLCPCB, a leading company in the field of rapid PCB manufacturing, officially launched its transparent flexible printed circuit (FPC), JLCPCB Launches Transparent FPC, opening new possibilities for industries ranging from medical aesthetics to consumer electronics. Three months after its release, the product received widespread praise from the medical aesthetics industry, transparent display developers, and electronics enthusiasts. Below is an in-depth exploration of this cutting-edge technology.



A butterfly-shaped light-emitting circuit board fabricated with JLCPCB's FPC technology

## Breakthrough Innovation

JLCPCB's transparent FPC is crafted from high-transparency, high-temperature-resistant PET material. Unlike conventional PET materials that often suffer from low transparency and weak copper adhesion, JLCPCB has developed a custom PET formulation offering 85% light transmittance - perfect for applications demanding both aesthetics and performance. This breakthrough material possesses flexibility, impact resistance, and lightweight properties, meeting the demands of modern industries such as wearables, automotive, medical devices, and transparent displays.

## Key Advantages

JLCPCB's transparent FPC delivers industry-leading performance, including:

- High Optical Clarity - Achieves up to 85% light transmittance for superior visual performance
- Excellent Thermal Stability - Withstands temperatures up to 200°C, ideal for demanding applications
- SMT Assembly Compatible - Fully supports surface-mount technology on transparent substrates
- Cost Efficiency - Offers 30~50% lower pricing compared to typical market rates without compromising quality

#### Special Note

JLPCB's FPC is currently part of a limited-time event. Visit the dedicated page to [claim coupons](#) during the promotion period.

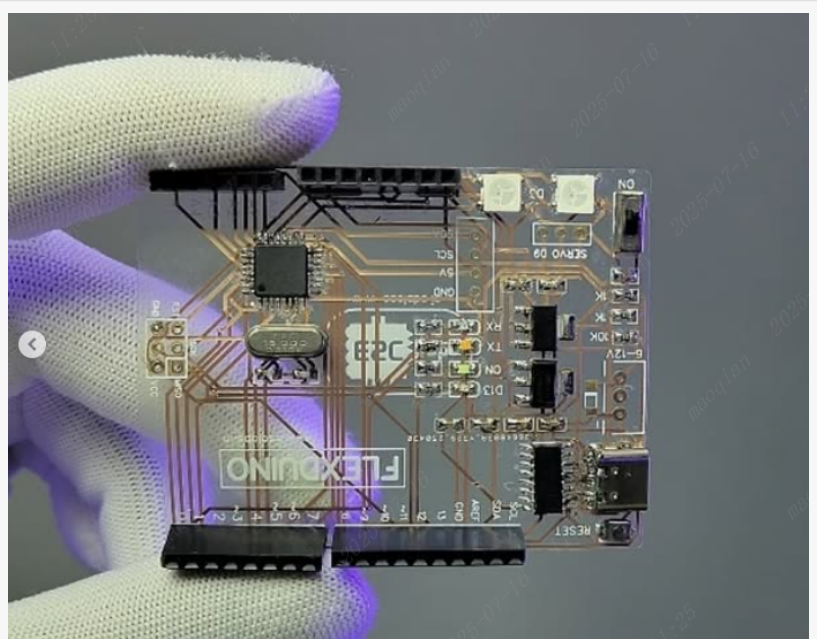
#### Common Applications of Transparent PCB

From wearables to automotive, displays, and medical devices, Transparent PCBs are making innovation visible.

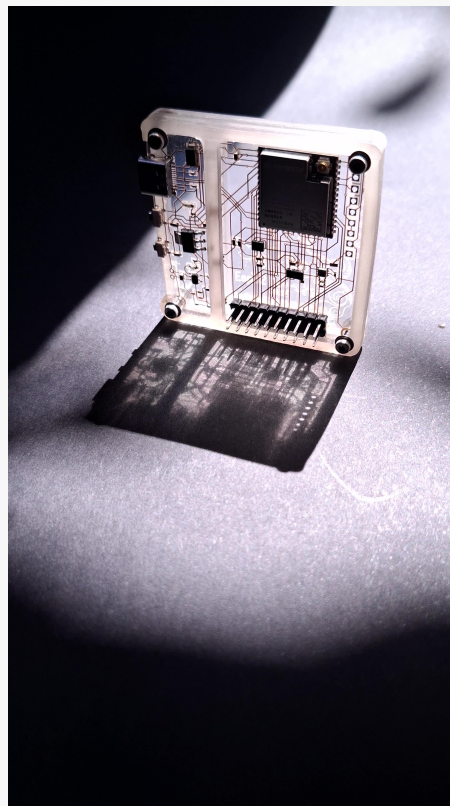
- Wearables: Ultra-flexible for comfort and durability.
- Automotive/Aerospace: Lightweight design boosts performance.
- Consumer Tech: Sleek, almost invisible connections for modern aesthetics.
- Medical & Industrial: Reliable in high-performance applications.
- Display Tech: 85% light transmittance—perfect for transparent screens and LED panels.

#### Market Insights for Medical Aesthetics Demand

The global medical aesthetics market is estimated to exceed \$21.86 billion by 2024, with a growing demand for flexible, biocompatible electronics. Among these, aesthetic devices such as magnetic facial lifting devices require precise contact with the face, requiring transparent and



Transparent PCB prototypes fabricated via JLPCB's prototyping service



JLPCB's FPC products have excellent light transmittance.

flexible PCBs. Previous surveys revealed that 20.2% of JLCPCB consumers expressed interest in transparent PCBs. JLCPCB's [transparent PCB \(FPC\)](#) ensures reliable performance and biocompatibility, making it an ideal solution for medical applications in direct contact with the skin.

### Supply and Future Outlook

Since the launch of JLCPCB's transparent FPC in May 2025, thousands of customers have already placed orders, with a repeat purchase rate exceeding 80%. With plans to expand into automotive, aerospace, and smart home applications, JLCPCB is driving the future of transparent electronics. The product is primarily used in the medical aesthetics, consumer electronics, and DIY invention sectors. As demand continues to grow, the company plans to expand its application scope to the automotive, smart home, and aerospace industries. As a one-stop industrial interconnected manufacturing platform, JLCPCB remains committed to providing cost-effective, high-performance solutions to meet the growing market demand for transparent, flexible, and reliable PCB technologies, driving global hardware innovation and making technological progress more efficient.

### [About JLCPCB](#)

JLCPCB is a leading manufacturer offering fast and comprehensive one-stop electronics manufacturing solutions. Founded in 2006, JLCPCB is dedicated to establishing a comprehensive, digital, and one-stop platform for industrial electronics manufacturing. By integrating EDA, PCB fabrication, components sourcing, and PCBA services, JLCPCB enables highly efficient and reliable turnkey production. Through continuous investment in innovation and digital systems, JLCPCB has rapidly grown into a leading global provider of cost-effective, high-reliability PCB and PCBA solutions.

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