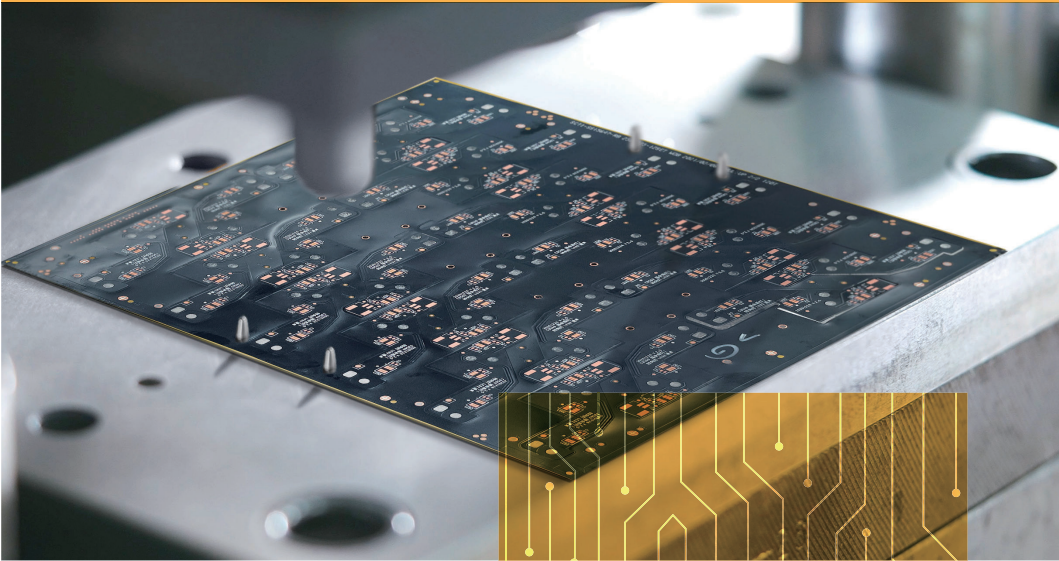


A Resourceful Flex PCB, Rigid-Flex and Flex PCB Assembly MFG



20+ YEARS OF
FLEXIBLE PCB
MANUFACTURING

Flex Plus (Xiamen) Co., Ltd.



Flex Plus (Xiamen) Co., Ltd is a leading flexible PCB (FPC) designer and manufacturer. Headquartered in South China, the company has been committed to providing customers with high-quality FPC since its establishment in 2004, and has won a good reputation for excellent quality and reliability.

As a one-stop solution for the development, manufacture and sales of electronic products, Flex Plus provides customers with the most comprehensive services. The company has the ability to produce a variety of FPC, including single-sided, double-sided, multilayer FPC, rigid-flex PCB, dual-access FPC (bare back), which meet the FPC needs of different industries such as medical devices, electric vehicles, telecommunications, industrial control systems, precision smartphone modules and hearing aids. With its high quality and fast turnaround time, We have gained the trust of more than 2,500 customers from North America, Europe, Japan, Taiwan China and Southeast Asia, cementing its position as the leading FPC supplier in Chinese mainland.



Innovative

Commitment to constant improvement



Efficient

Commitment to maximizing resources



Reliable

Commitment to meeting customer needs

HISTORY OF FLEX PLUS

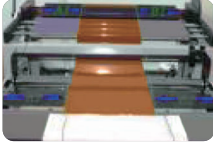
-
- 2004 Flex Plus (Xiamen) was established.
 - 2006 Expanding into overseas markets strategically. Differentiating in FPCB technology fields.
 - 2008 Doubling production capacity, while maintaining industry-leading product quality.
 - 2010 Initiate deep cooperation with NIDEC Japan. Establish a 500m² Class-10,000 inspection and packaging workshop.
 - 2012 Obtain ISO 9001/14001 management and environmental certification.
 - 2015 Successfully develop renowned overseas clients in the medical and healthcare field, and receive positive feedback.
 - 2017 Obtain ISO/TS 16949 management system certification.
 - 2021 Retrofitting, factory renovation and equipment upgrade.
 - 2022 Achieve monthly capacity of 15,000 SQM.
 - 2023 Layout "3+1+X" product technical positioning.

WORKFLOW OF MANUFACTURING FPC



● Recieve drawing from customer

● EQ confirmation from customer



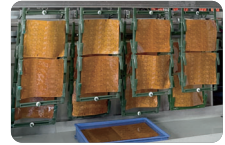
1. Cutting



2. CNC Drilling



3. Black hole



4. Plating copper



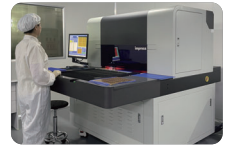
5. Dry film layup



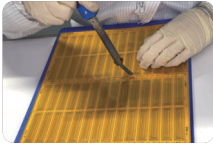
6. Exposure



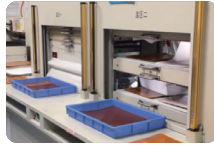
7. DES



8. AOI



9. Coverlay layup



10. Coverlay lamination



11. Pretreatment



12. Plating / Immersion



13. Silk screen



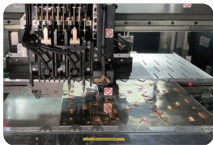
14. Stiffener / PSA



15. CCD Drilling



16. O/S Testing



17. SMT



18. Outline punching



19. FQC / FQA



20. Packing

Item	Description
Layer	Flex board: 1-12 Layers Flex-Rigid Board: 2-22 Layers
Base Material	PI, PET, PEN, FR-4
Final Thickness	Flex board: 0.002"-0.032" (0.05-0.8mm) Flex-rigid board: 0.0024"-0.04" (0.06-1.0mm)
Surface Treatment	Lead-Free: Gold Plating, ENIG Gold, OSP, Immersion Tin, Tin Plating
Max Panel Size	Max: 10"x80"
Min Trace Width / Min Clearance	Inner: 1/2oz:3/3mil 1oz:4/4mil 2oz:5/6mil Outer: 1/3oz-0.5oz:4/4mil 1oz:4/4mil 2oz:5/6mil
The smallest via diameter Hole PAD (Flex Board 2L-6L)	6mil / 16mil
The smallest via diameter Hole PAD (Rigid Flex Board 2L-6L)	10mil / 24mil
Copper Thickness	1/7oz - 8oz
Max/Min insulation Thickness	2mil/0.5mil (50um/12.5um)
Min Hole Size and Tolerance	Min hole: 6mil Tolerance: PTH±3mil, NPTH±2mil
Min Slot	20mil x 30mil
Circuit trace to outline (1L-2L)	6mil
Circuit trace to outline (>=3L)	8mil
Solder Mask Alignment Tolerance	±4mil
Silkscreen Alingment Tolerance	±6mil
Silkscreen Line Width	5mil
Gold Plating	Nickel: 80u"-320u" Gold: 1u"-6u"
Immersion Nickel / Gold	Nickel: 80u"-300u" Gold: 1u"-3u"
Tin Plating	Film: 40u"-600u"
Immersion Tin	Film: 8u"-20u"
OSP	Film: 1u"-3u"
Test Voltage	Testing Fixture: 50-300V
Profile Tolerance of Punch	Accurate mould: ±2mil Ordinary mould: ±4mil Knife mould: ±6mil

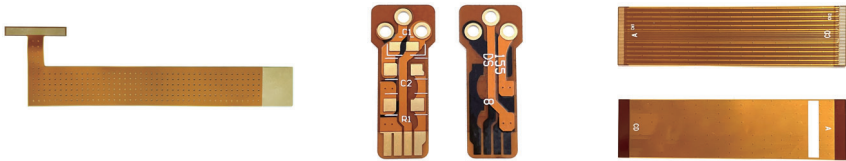
OUR PRODUCTS



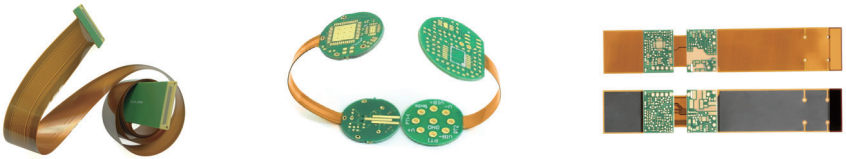
Single sided FPC



Double sided FPC



Rigid-flex & Multi layers FPC



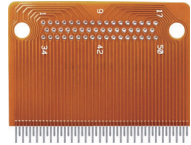
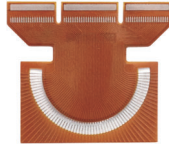
Split (Multi layers) FPC



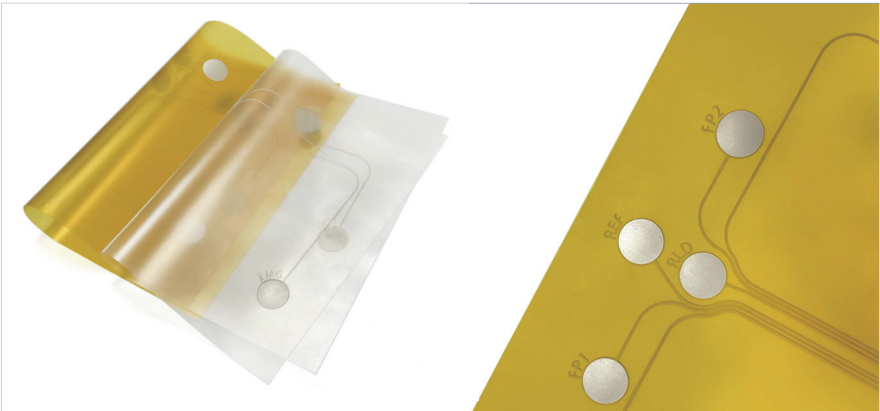


OUR PRODUCTS

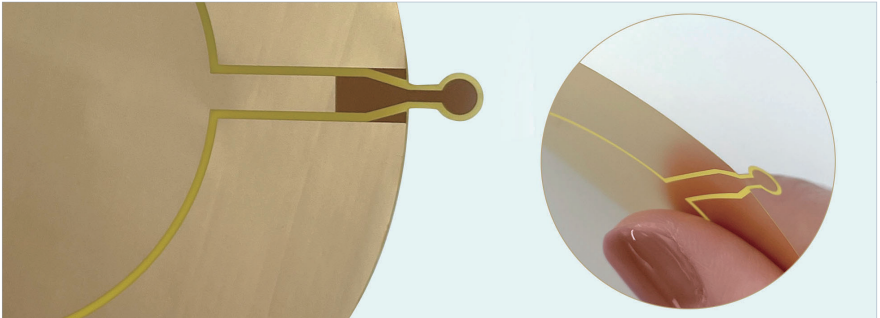
Sculpture & Bare back FPC



TPU material FPC



Ultra-thin double-sided FPC (thickness less than 25µm)



MARKETS WE SERVE



At Flex Plus, we specialize in crafting high-quality Flex PCBs designed for diverse applications. Our Flex PCBs delivered from China, with management system of ISO 13485, IATF 16949, Flex Plus continues offer unparalleled flexibility, enabling them to adapt to the unique requirements of various industries, including automotive, medical devices, consumer electronics, aerospace, and more. With our expertise and cutting-edge manufacturing processes, we deliver reliable and efficient Flex PCB solutions that empower innovation and drive progress in a wide range of applications. Trust Flex Plus for your flexible circuit needs and experience the difference in performance and versatility that our products bring to your projects.



Medical & Healthcare



Automobile / EVs



Consumer Product



Industrial Control & Others





Electric Vehicles

- Power inverters
- Display and control units
- Motor controllers
- Vehicle communication units
- DC-DC converters
- On board charging systems
- High-voltage junction boxes
- Battery management system (BMS)

Micro motor for Medical Devices & Consumer Product

- Sleeping monitors
- Leads to control unit
- Oximeter sensor & display
- Motors in endoscopes
- Motors in surgical instruments
- Motors in drug delivery devices
- Motors in rehabilitation devices
- Pacemaker
- Patient monitor
- Battery connectors
- Stepper motors
- Vibration motors
- Brush DC motors
- Voice coil motors (VCMs)



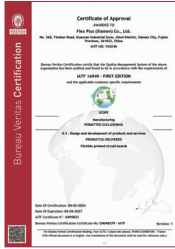
Industrial Control System (ICS) & Robots

- Displays
- Power distribution
- Actuators
- Controllers & Control units
- Sensors & Cameras
- Communication networks
- Input/Output (I/O) Interfaces
- Communication interface

ACCREDITATIONS



ISO 13485
Medical Device



IATF 16949
Automotive
Quality Management



ISO 9001
Quality
Management



ISO 14001
Environmental
Management



UL
Quality System

COOPERATIVE CLIENTS



Honeywell

TOSHIBA

FUJIFILM

LEELEN 立林



...





Rich industry experience



Flexible capacity of
production & Delivery



Reasonable
product prices



Excellent quality &
Continual improvement



Various procurement channels
for unconventional materials



Comprehensive
management system



Professional Flexible PCB Manufacturer

Flex Plus (Xiamen) Co., Ltd

☎ +86 592 6388007 +86 189592248350 ✉ oversea@fpc-plus.com
📍 No. 568, Tieshan Road, Guannan Industrial Zone, Jimei, Xiamen, China