

LP Elektronik Ltd.

Company profile

Sales Diagram

Product Mix



- Rigid PCB
- Flex PCB
- Rigid - Flex PCB
- Assembling

LP Elektronik's structure



About Us

- For a long time the LP Elektronik Ltd. has been playing a meaningful role in the PCB market in Central-Europe. The services offered by the company cover the design, the manufacturing and the assembly of printed circuit boards.
- LP Elektronik is at the complete disposal of the partners with its safety technology and developed business culture. For the customers all possible technologies and solutions are available at LP Elektronik. We are the partner of our clients as a remoted customer care in the huge market of PCB's worldwide.
- Our permanent presence in the market can be thanked to our meaningful previous experiences in the PCB production, furthermore to our extensive knowledge in the electronic sector. We provide all the services required by our consigners - from the planning to the assembly - on the highest technological level. Our knowledge about the market help us to find the best supplier regarding price, quality and delivery date.
- The only thing you have to do is to charge LP Elektronik with realising your aims. We provide you the PCB's according to your expectations. The contract manufacturers of LP Elektronik has comitted themselves to the continuous technical and technological development. This aspect assures us the advanced-levelled execution of both traditional single- and double-sided boards and multilayers.



About Us

- For checking the data we use CAD/CAM tools, this way your PCB can be produced according to your ideas.
- The metallization of the holes with 0,2 mm in which there is being showed an increasing interest and the possibility of decreasing the tracks and gaps down to 100-125 microns are assured by an up-to-date Direct Metallization Technology.
- Demand on blind-, burried- and micro-VIA's are nowadays already general requirements from our clients.
- Beside the surface finishing process being used up to the present (Hot Air Levelling) we can provide you all kind of other surface protection solutions: Immersion Tin, Immersion Gold and Immersion Silver and Leadfree HAL.
- The high technological level of our products reflects the companies' quality policy: all the base materials and chemicals used for the production are in possession of the necessary quality certifications. (UL)
- The suppliers of our final products are qualified by ISO 9002 ,QS 9000 ,UL ,ISO 14000. The LP Elektronik Ltd. itself possesses the ISO certification as well.



Rigid Conventional PCB

Production Capabilities	Rigid PCB
Layer counts:	1- 48 layers
Maximum sheet size:	650 x 650 mm
Board Thickness:	0,3 – 7 mm
Finished copper thickness on outerlayers:	1 oz – 15 oz
Finished copper thickness on innerlayers:	½ oz – 5 oz
Minimum line/ space	0,075 mm
Minimum finished hole diameter (mechanical)	0,2 mm
Minimum finished hole (laser)	0,1 mm
Aspect ratio	12:1

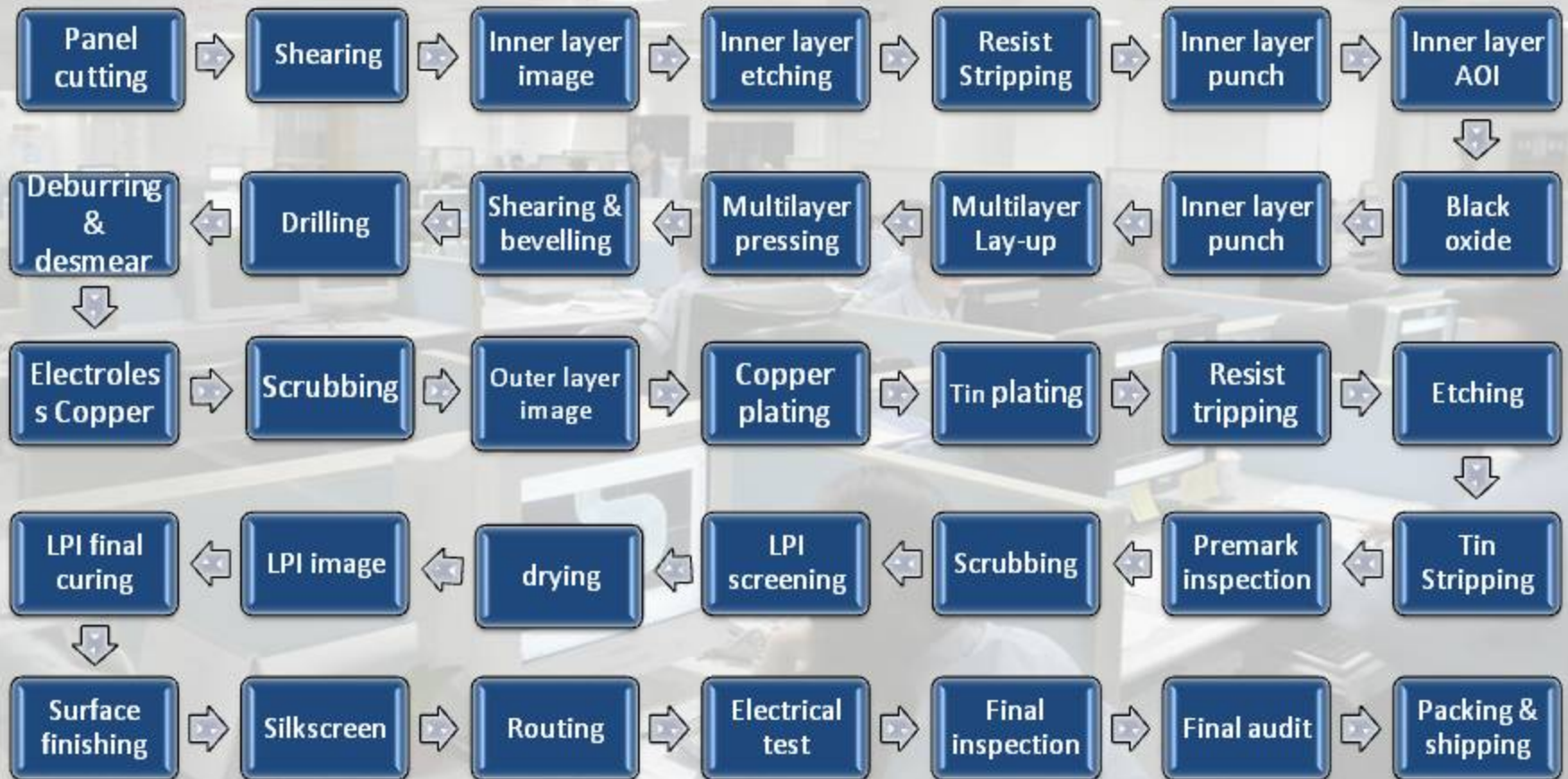
Rigid Conventional PCB

Production Capability	Rigid PCB
Impedance control tolerance :	±10%
Surface finishes:	Lead-free HASL, HAL, ENIG, immersion tin, immersion silver, OSP, GoldConnectors Carbon print, Flash Gold, Hard Gold
Base material:	FR-4, high Tg, halogen free, BT-epoxy, Arlon 25FR, Rogers 4350, PTFE, CEM, polyimide, mixed dielectric, Aluminium
Other options:	Peelable mask, carbon ink, Blind & buried vias, microvia, HDI Technology

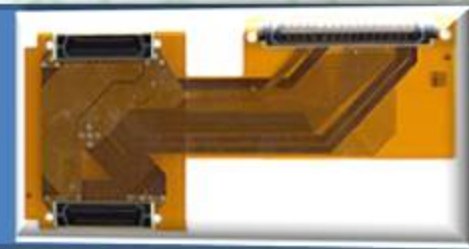
Quick Service PCB

- In order to help customers to reduce the R&D period and be the winner in the market, we provide quick turn PCBs, both prototypes and small volume production batches. With our quick response and the professional service of dedicated quick-turn PCB manufacturers, we can supply PCBs within one week as normal, and 3 days in urgent situations.
- Double-Sided: 2 days
 - 4-Layer: 5 days
 - 6-Layer: 6 days

Flowchart for Rigid PCB



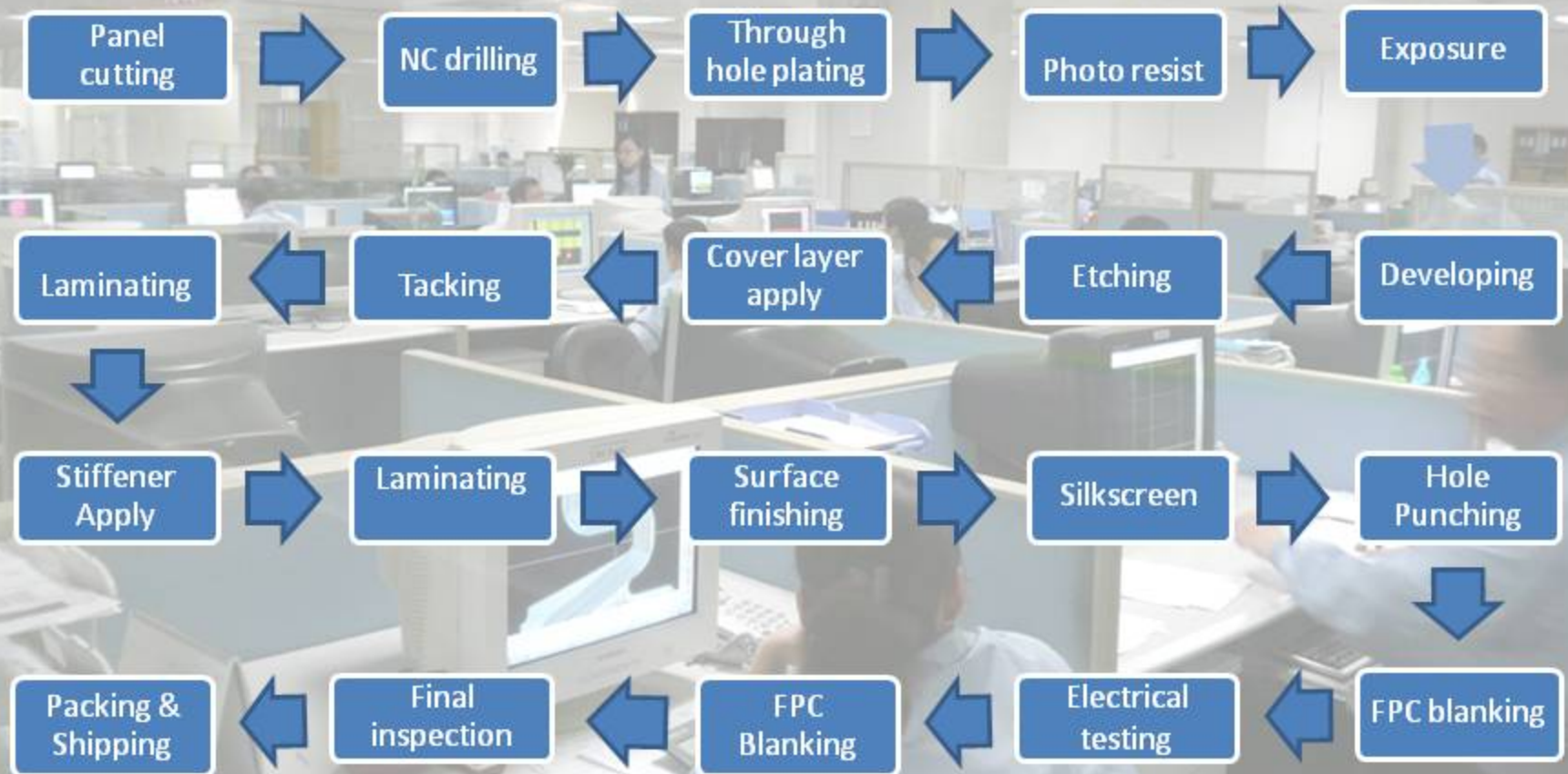
Flexible PCB



Production Capability	Flexible PCB
Layer Counts	1-4 layer
Base Materials	Polyimide, Polyester, PEN
Surface Finishes	Gold, HAL, Tin, OSP, Silver, Carbon, Lead Free HASL
Minimum track / space	0,05 mm
Minimum Hole Diameter	0,15 mm
Copper Thickness	½ oz – 1 oz



Flowcharts for Flex PCB

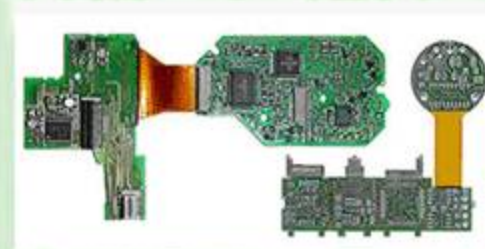
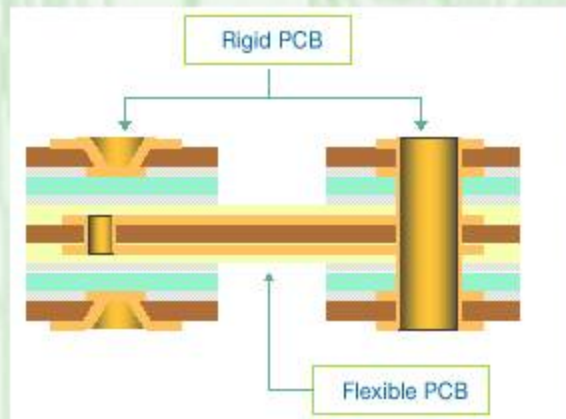


Rigid – Flex PCB

Production Capability	
Layer counts	2-8 layers
Base material	Kapton, PI, PET (Flex)/FR4 (Rigid)
Base material thickness	12.5micron - 50 micron (Flex) /0.1mm to 3.2mm(Rigid)
Copper thickness	1/2 oz to 1 oz
Protective film thickness	12micron to 25micron
Adhesive thickness	12 micron to 35 micron

Rigid – Flex PCB

Production Capability	
Reinforcement Maximum board size	PI, PET, FR4, Stainless steel 250 x 500 mm
Minimum Line/ Space	0,05 mm
Minimum hole	0,15 mm
Surface Finishing	ENIG

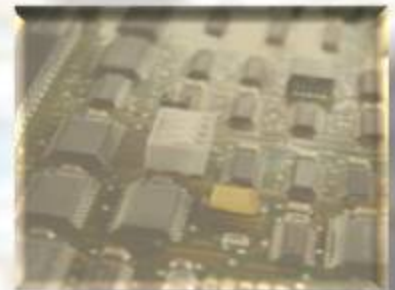


Flowchart for Rigid – Flex PCB



PCB Assembling

- surface mount capacity ~ 2,000,000 points each day, as well as increasing our capabilities in terms of minimum package sizes (down to 0402) and fine pitch (down to 0.30mm) devices QFP, COB and BGA, *etc.*
- Manual PCB assembling and SMT mounting
- Reflow soldering improve the quality of welding for both HASL and lead free HASL.



Quality

- **Quality management system ISO9001**

Both LP Elektronik and our suppliers of printed circuit boards have certified quality management systems towards ISO9001.

- **UL-approval**

All of our suppliers have of course UL-approval.

- All of our Suppliers are accredited by ISO9000, QS9000, CQC, ISO14001. ISO/TS 16949

Applications

- Automotive industry
- Industrial applications
- Optical Storage
- White House industry
- Telecommunications parts
- TV, DVD, GPS Systems
- Bank System



Thank you for your attention.



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