

Printed Circuit Boards European Production

We provide PCBs of up to 48 layers from selected European suppliers. Here we do not only focus on the price but on a reasonable value for money.

Based on a detailed and skillful preparation and evaluation of the technical feasibility the placement can be optimized by you or your service provider. Please contact us! We would be glad to submit you our quotation according to your requirements...

Services of our European production (Red marked = standard)

Layers

- one-sided
- two-sided
- multi layer of up to 48 layers

Time of delivery: We also offer EXPRESS - SERVICE.

- 2 working days (+300%)
- 3 working days (+200%)
- 4 working days (+125%)
- 5 working days (+100%)
- 6 working days (+ 80%)
- 7 working days (+ 60%)
- 8 working days (+ 40%)

ATTENTION: The day of order placement and the day of delivery are not included.

· approx. 10 – 11 working days (standard up to 50 pcs.)

· approx. 14 – 15 working days (standard up to 51 pcs.)

Copper

- Cu starting thickness: 9µm 12µm 18µm 35µm 70µm 200µm 400µm
- Cu standard finishing thickness: 35µm 70µm 105µm 210µm 400µm

Width of circuit path / -distance

50µm 75µm 100µm 125µm 150µm 200µm

Vias & component gaps

Via min.: - 75µm 100µm 125µm 150µm 200µm 300µm
 Blind via min.: 50µm 75µm 100µm 125µm 150µm 200µm 300µm

Aspekt Ratio: 1:1

Annular ring via: 100µm 125µm 200µm
 Annular ring component: - - 200µm
 Pressfit technology: YES

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Mechanics

Milling:

- **outline contour (square = included)**
- special contour
- interior
- Z-axis (depth milling)

Gaps: YES

Jumping V-cut operation: YES

Surface

Finish:

- **HAL (lead free)**
- **chemical tin**
- chemical silver
- chemical gold (approx. 5 µm Ni + 0.05 µm - 0.10 µm Au)
- Bond gold for gold wire (approx. 5 µm Ni + 1-2 µm Au)
- Bond gold for aluminium wire (approx. 5 µm Ni + 0.1 µm AU)
- **Cu bare**

Site plating: YES

Gold-plating of connector: YES

Ident print (silk layer)

- **white (1x included)**
- yellow
- black

Lasing of SMD master plate: YES

Solder mask

- **green (2x included)**
- white (SD2497 SG)
- red (SD2437 SM)
- dark blue (SD2457 SM)
- black (SD2447 SM)

Peelable solder mask: YES

Carbon finish: YES

Base material

Material:

- **FR4 (data sheet)**
- FR4 high-TG
- Rogers 4350
- G200
- P97
- Polyimid (Flex, Starrflex)

Maximum size of PCBs

- 1 - layer PCB: 720 mm x 560 mm
- 2 - layers PCB: 720 mm x 560 mm
- Multi layers PCB: 635 mm x 510 mm

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FR4 available thicknesses (2 layers)

- | | |
|--|----------|
| · 0,3 mm | · 1,2 mm |
| · 0,5 mm | · 1,6 mm |
| · 0,8 mm | · 2,0 mm |
| · 1,0 mm | · 2,4 mm |
| · special thicknesses of up to 6 mm upon request | · 3,2 mm |

Quality control

E-Test (included from 2 layers upwards)

A.O.I. Automatic Optical Inspection (included for multi layers)

X-RAY misalignment control (included for multi layers)

Impedance control

Tolerance 10% 7.5% 5%

Special

Customized layer design: YES

Flex- / Starrflex PCBs: YES

Metal core PCBs: YES

Please note that purchase orders for express service are NO firm deals. Firm deals require special agreements. As to short shipments we explicitly indicate that we bill the express surcharge for ALL PCBs delivered in time. For PCBs delivered at a later date the corresponding reduced rates will be charged.