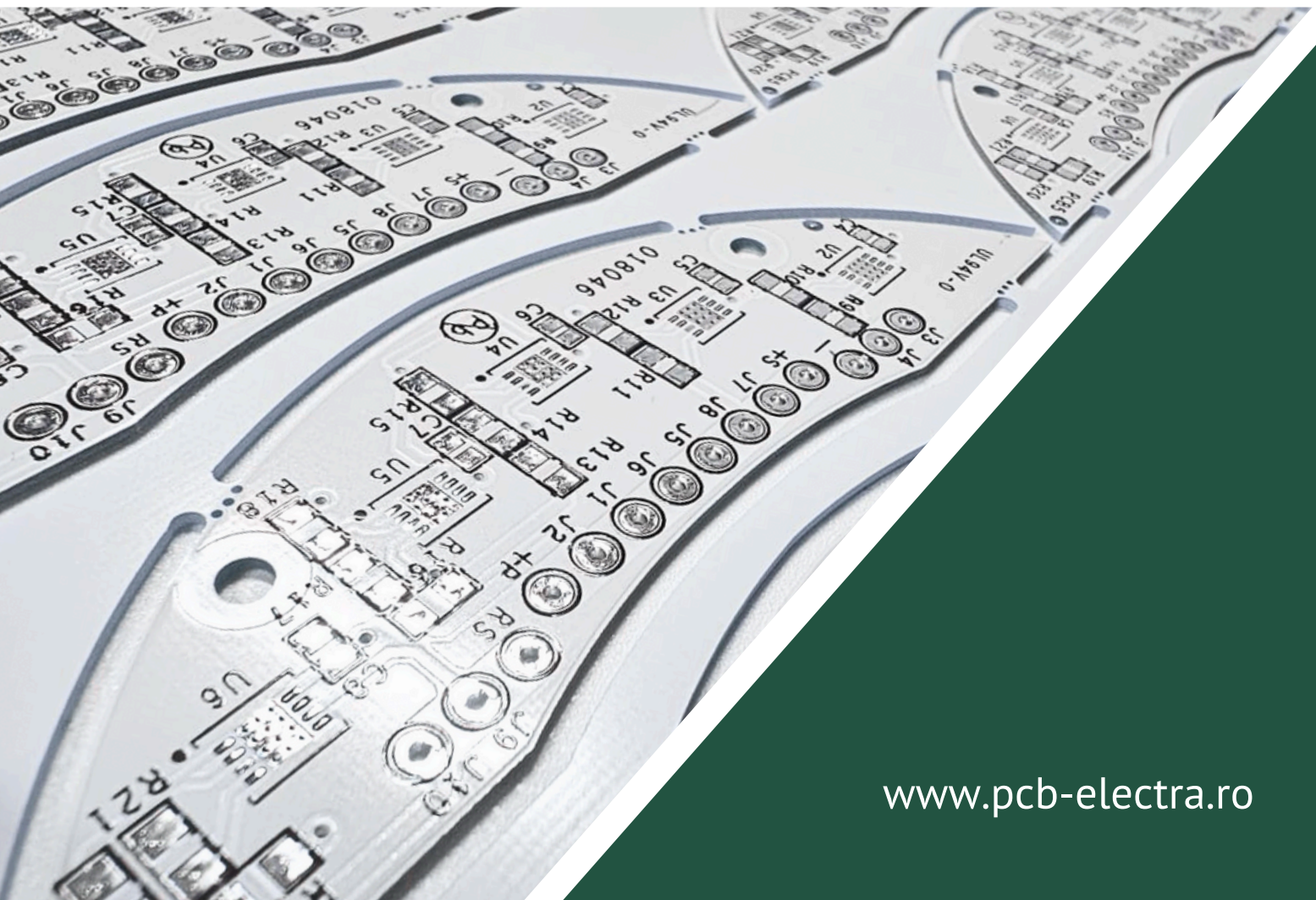

PCB **ELECTRA**

PRINTED CIRCUIT BOARDS

Your European PCB Manufacturer



www.pcb-electra.ro



About Us.

PCB-ELECTRA is an **ELECTRA** brand, part of the **ELECTRA Group** of companies, and it is a 100% privately owned company, with over 18 years of experience in the **END-TO-END manufacturing of printed circuit boards**.

Our printed circuit board production lines are located in a new and modern space in Iași (Romania), designed to optimally integrate all the necessary operations for a complete production flow.

Our PCBs are engineered and manufactured **100% IN-HOUSE & IN EUROPE**, which translates to:

- ✓ **FULL CONTROL** over the supply & production process.
- ✓ **FLEXIBILITY** in tailoring your PCBs according to your needs and requirements.
- ✓ Efficient **COST OPTIMIZATION** for meeting your budget, without compromising **QUALITY**.
- ✓ **FAST ORDER PROCESSING & DELIVERY:**
 - **9 working days** (standard orders)
 - **5 working days** (urgent orders).

WHAT WE DO

PCB-ELECTRA designs and produces **ON-DEMAND PRINTED CIRCUIT BOARDS**, providing a wide range of services adaptable to various requirements and at reasonable prices:

- **Printed circuit board design**
- **Single layer, double layer, four-layer & six-layer printed circuit board production**
- **Serigraphic screen design & production.**
- **Plastic injection, electrostatic powder coating & 3D printing**



TECHNICAL DETAILS

Our PCB's are produced using **quality raw materials**, with the following characteristics:

- **Laminate:** FR4, IMS (Aluminium substrate)
- **Single layer, double layer, four-layer and six layer** printed circuit board production
- **Material thickness:** 0.51 mm – 2.4 mm
- **Copper layer thickness:** 18, 35, 50, 70 microns
- **Glass transition temperature (TG):** 135°C (standard), 150°C, 170°C
- **Solder mask of different colors:** green, white, black, red, blue, yellow
- **Silk screen of different colors:** standard - white, black; special - red, yellow, blue
- **Maximum panel size:** 390 x 510 mm (1–2 layers). For **multilayer PCBs** (4–6 layers), the **maximum panel size** is: 335 x 440 mm
- **Minimum drill diameter:** 0.3 mm with a 0.5 mm pad
- **Maximum drill diameter:** 6.4 mm. Holes larger than 6.4 mm must be created by milling rather than drilling.
- **Minimum track thickness:** 0.15 mm
- **Minimum isolation between tracks:** 0.15 mm
- **HASL-LF** (Hot Air Solder Level – Lead-Free) - RoHS compliance
- **Automated optical inspection (AOI)** and **comprehensive electrical testing (FLYING PROBE)** applied to all printed circuit boards
- **Plated milling**
- **Castellated holes:** hole diameter > 1 mm, hole-to-hole spacing (pitch) 0.5 mm
- **Chamfering**
- **One-side scoring**
- **Depaneling process:** V-Cut (Scoring), Milling.

MANUFACTURING RECOMMENDATIONS

Trace and isolation by copper layer thickness:

- **FR4 18/18 base, up to 35/35 final:** minimum trace width 0.15 mm with 0.15 mm spacing. For increased copper (up to 50 µm final), recommended trace width and spacing: 0.18 mm.
- **FR4 35/35 base, up to 55/55 final:** minimum trace width 0.22 mm with 0.22 mm spacing. For increased copper (up to 70 µm final), recommended trace width and spacing: 0.25 mm.
- **FR4 70/70 base, up to 90/90 final:** minimum trace width 0.28 mm with 0.28 mm spacing. For increased copper (up to 105 µm final), recommended trace width and spacing: 0.3 mm.

MADE IN EU

The majority of the raw materials we use for our products are **SOURCED WITHIN THE EUROPEAN UNION**, with final production carried out in our **EU-based facility**.

Comprehensive documentation is available to verify both the origin of materials, and the manufacturing location.

COMPLIANCE

- **CE COMPLIANCE** - All our products **meet relevant European Union directives** for safety, health and environmental standards.
- **IPC-A-610G** - Acceptability of Electronic Assemblies Standard (Classes 1, 2, and 3).

CERTIFICATIONS

ISO 9001:2015

Quality Management System, Certificate no. 20100233107288/02
TÜV AUSTRIA GMBH

ISO 14001:2015

Environment Management System, Certificate no. 20104233017287/02
TÜV AUSTRIA GMBH

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SCAN ME



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