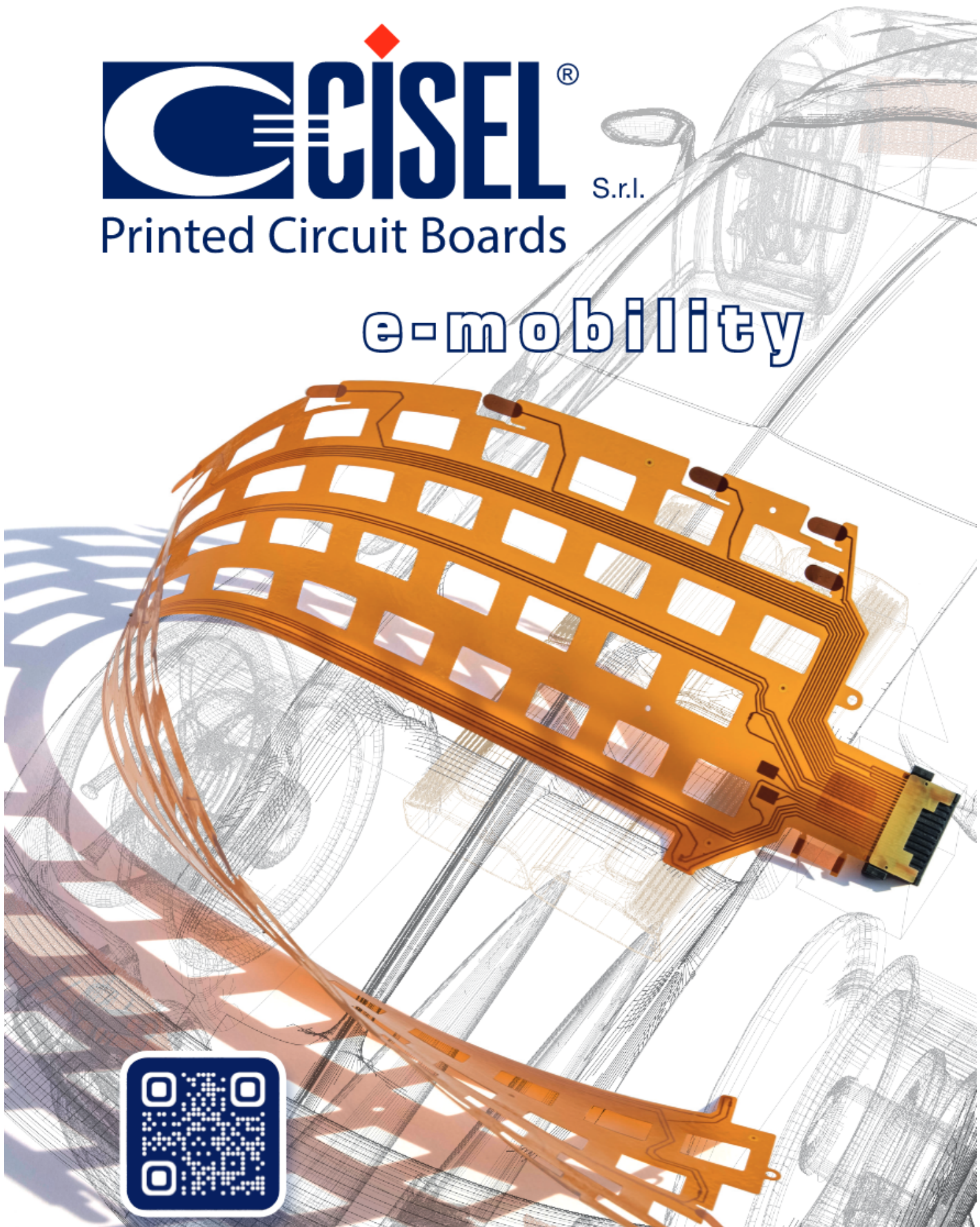


CISEL®
S.r.l.
Printed Circuit Boards

e-mobility



**Cisel srl, a Leader Company in design
and production of rigid and flex PCB
with innovative technology,
high quality standards
& Made in Italy**

Pcb Technology

FLEX PTH-IMS MLB RIGID FLEX SINGLE SIDE



HIGH TECHNOLOGY PRINTED CIRCUIT BOARDS PRODUCTION

 **made in italy**

ELECTRIC REVOLUTION

We are at the beginning of the “electric revolution” of the automotive industry.

The European Union has set itself ambitious goals to respond to the challenges posed by climate change and environmental impact.

As a result, manufacturers have brought forward innovative solutions in areas such as batteries, making electric vehicles a truly viable alternative for the first time.

There will be many challenges in the near future, and Cisel is ready to support this epochal change.

Thanks to years of experience and high technological know-how Cisel is able to assume a leading role in the “electric revolution” in progress.

The current market demand is increasingly large FLEX PCB for the interconnections for the battery pack.

These flex pcb have also the function of the temperature monitoring inside battery pack.

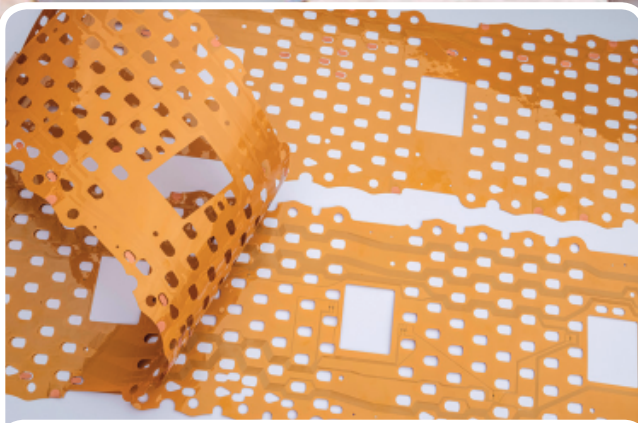
Hence the need to assemble SMD components on the FLEX, such as the NTC, fuses, connectors and metal contacts tabs, also with specific resins, adhesive tapes, thermal pads and reinforcements.

In particular, the metal contacts tabs can also be obtained directly from the copper traces of the PCB.

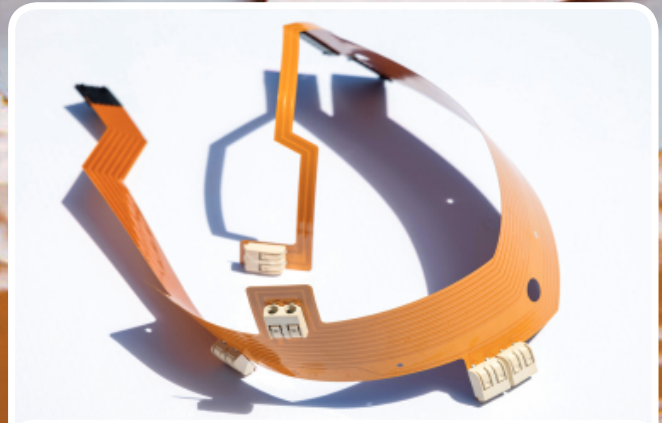
This solution has been developed by Cisel since several years and is already adopted by many customers.

Cisel has invested in customized production machines and SMD assembly lines; we can currently accommodate requests up to 1.8 metres.

Next challenge is to produce FLEX PCBs longer than two meters assembled with SMD components.



FLEX PCB consisting of 1 pcb single side with soldered NTC + 1 pcb double side with welding tabs obtained from copper layer and accessible on both sides, both inserted into a housing by crimping contact, length 1500 mm

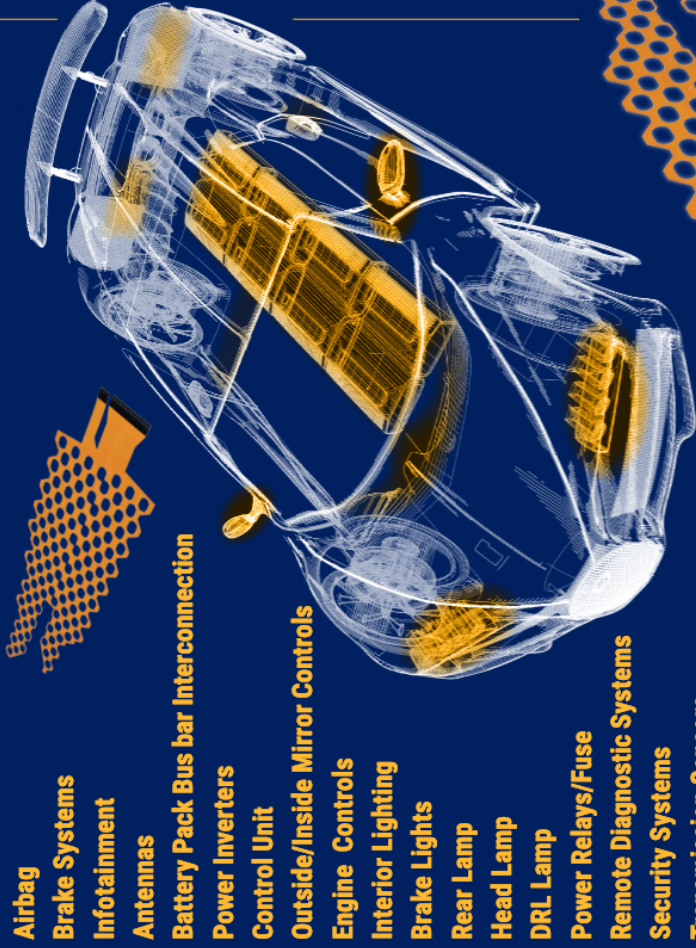


FLEX PCB Single Side copper accessible for both side, SMD soldered with special connectors and NTC for Battery pack interconnection

Automotive Printed Circuit Boards

Printed circuit boards are used in many ways in the automotive industry and have changed the way that people drive

APPLICATIONS



Airbag

Brake Systems

Infotainment

Antennas

Battery Pack Bus bar Interconnection

Power Inverters

Control Unit

Outside/Inside Mirror Controls

Engine Controls

Interior Lighting

Brake Lights

Rear Lamp

Head Lamp

DRL Lamp

Power Relays/Fuse

Remote Diagnostic Systems

Security Systems

Transmission Sensors



e-mobility

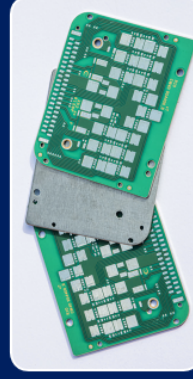
In addition to the existing products, Cisel has developed a wide range of highly complex pcbs, customized according to the Customer needs, using the most advanced materials and production technologies, and where necessary, creating customized machinery for the production in order to achieve the high technological and quality standards required, all made in Italy.



FLEX PCBA one side layer
welding tabs obtained by
copper, accessible from both
side Connector and NTC SMD
soldered



FLEX PCB single layer, length
1100 mm soldered with NTC
and Nickel Tabs



IMS Single Sided PCB for High
power dissipation PCB

HIGH TECHNOLOGY PRINTED CIRCUIT BOARDS PRODUCTION

 made in Italy



Cisel, an Italian company, leader in the design and production of quality and high-tech pcb.

Established in 1976, during the years, the company has developed a wide range of skills and know-how.

Thanks to its great experience gained in these years, Cisel is able to produce any type of printed circuits: single and double-sided with plated through holes - multilayer - aluminum (or metal core) - flex - star flex.

Cisel can supply PCBs with assembled components in SMD and THT technology.

Our products are widely used in many sectors, such as Automotive, Lighting, Industrial, Medical, Banking and Appliance.

Cisel installed the first production line for flexible PCB in 1984.

With six reel to reel production lines, Cisel is the European Leader manufacturer in this technology.

Over the last 30 years, the demand of the Flex PCB technology increased a lot. Sectors such as Automotive, Medical, Industrial & Lighting, have introduced these products more and more and Cisel is proud to have been pioneer and an integral part of this growth. Today Cisel is able to offer the most advanced technology and is the ideal partner for all those customers that want to win the challenge in global markets through quality, competitiveness and innovation.



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