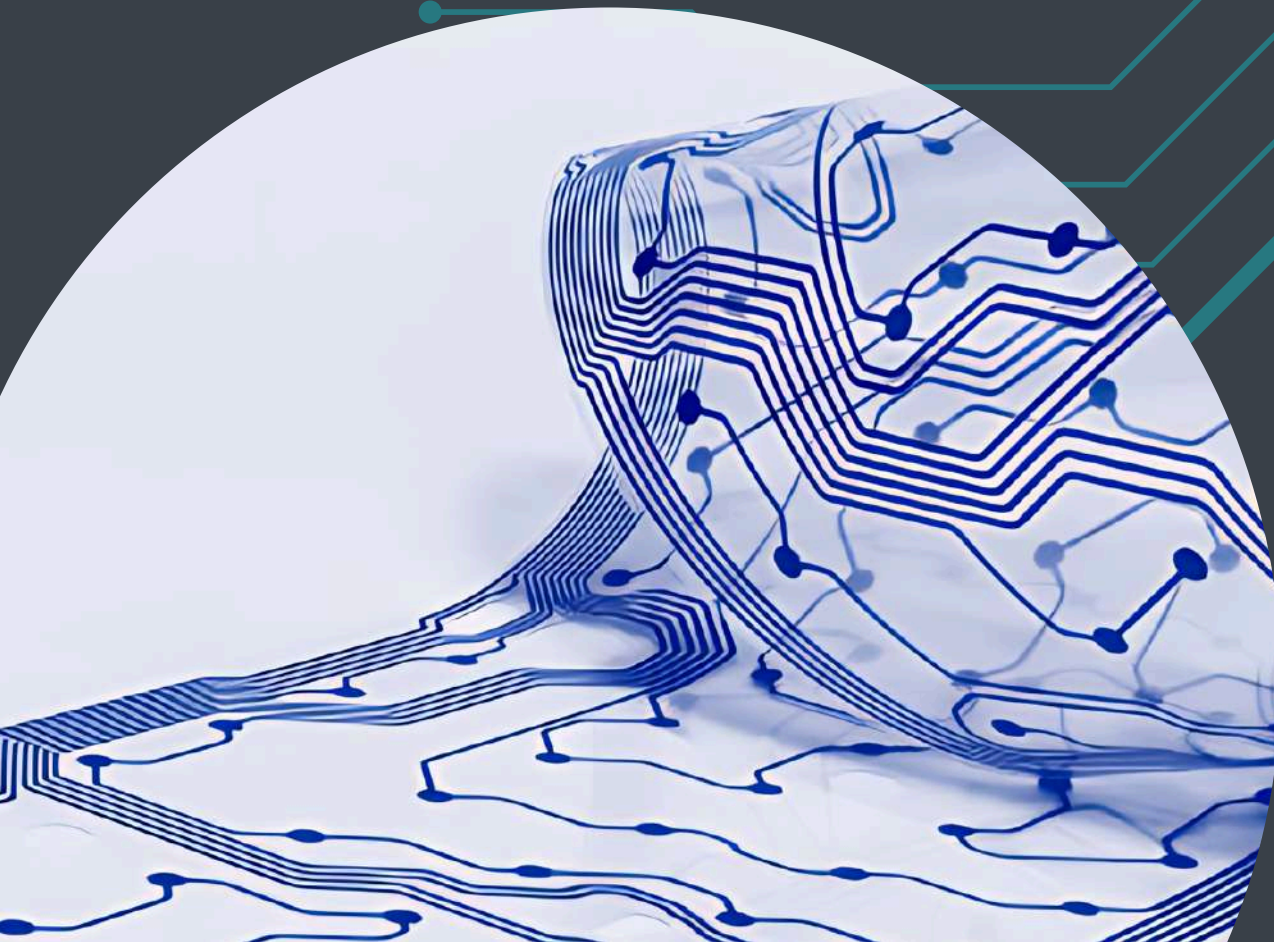


A NEW GREEN, THIN AND FLEXIBLE ELECTRONICS

Printed Electronics



A NEW GREEN, THIN AND FLEXIBLE ELECTRONICS

As electronics is moving towards new 3D shapes and forms, incorporating capacitive sensing and switching, an innovative way of conceiving electronics has been developed:

Printed Electronics.

Printed Electronics represents a thin, green, lightweight, flexible and robust solution for PCBs, moving from subtractive to **additive** processes.



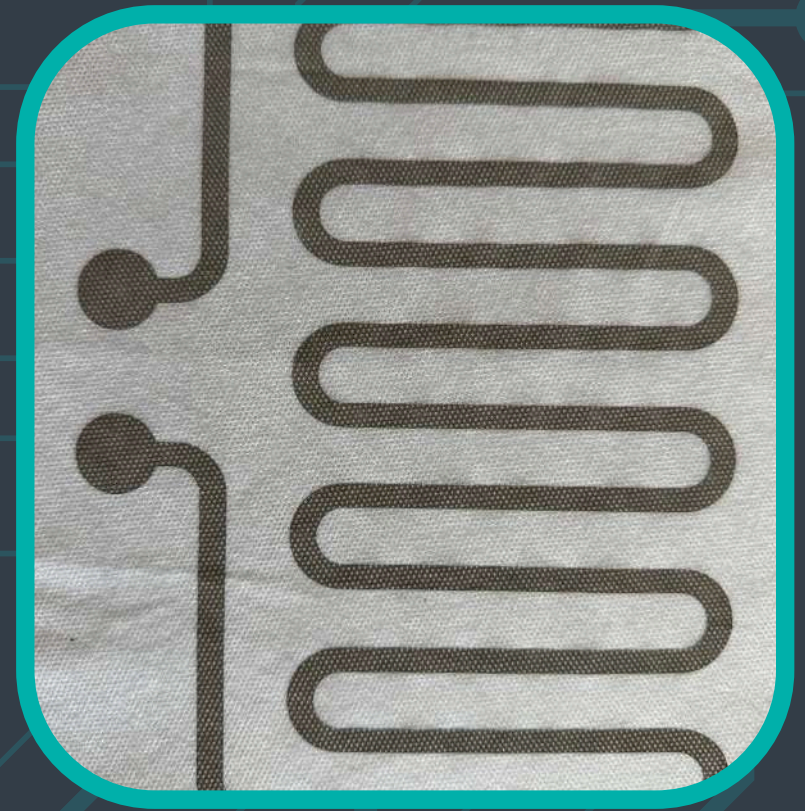
FLEX SUBSTRATES

MATERIAL	THICKNESS
PET	100-125-175 μm
PEN	50-75100-125 μm
PC	175 to 500 μm
TPU	120 μm

PP in production with Al foil, to be tested with inks for Printed Electronics

OTHER MATERIALS

- Paper
- Fabric
- Rigid and semi rigid materials
- Substrates adaptable to specific inks



POLYMER THICK FILM INKS

TYPES:

- **Dielectric** and **protective** inks
- **Stretchable** inks
- **Resistive** inks
- **EL** (Electroluminescent)
- **Transparent** inks

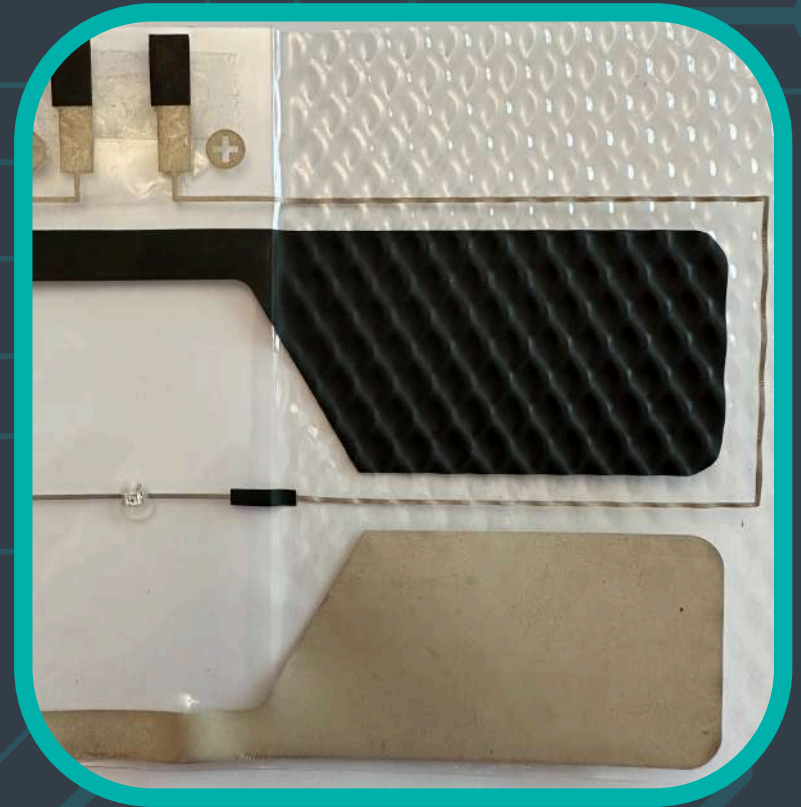
MATERIALS:

- Silver
- Silver with nanoparticles
- PEDOT
- Copper
- Carbon

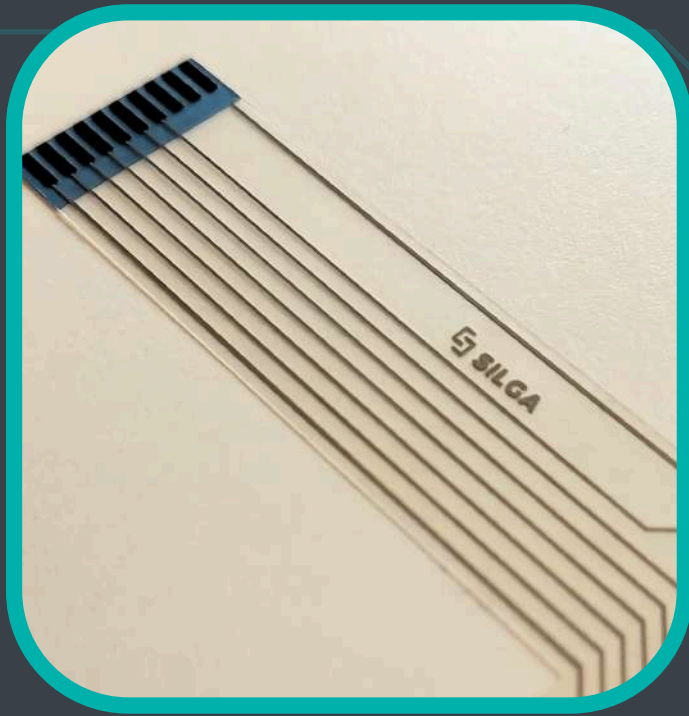


IN-MOLD ELECTRONICS (IME)

- Union of capacitive sensing and 3D shapes on a thin substrate
- Thanks to thermoformable silver inks it is possible to overmold and to obtain an integrated device
- Improved touch performances and ease of assembly



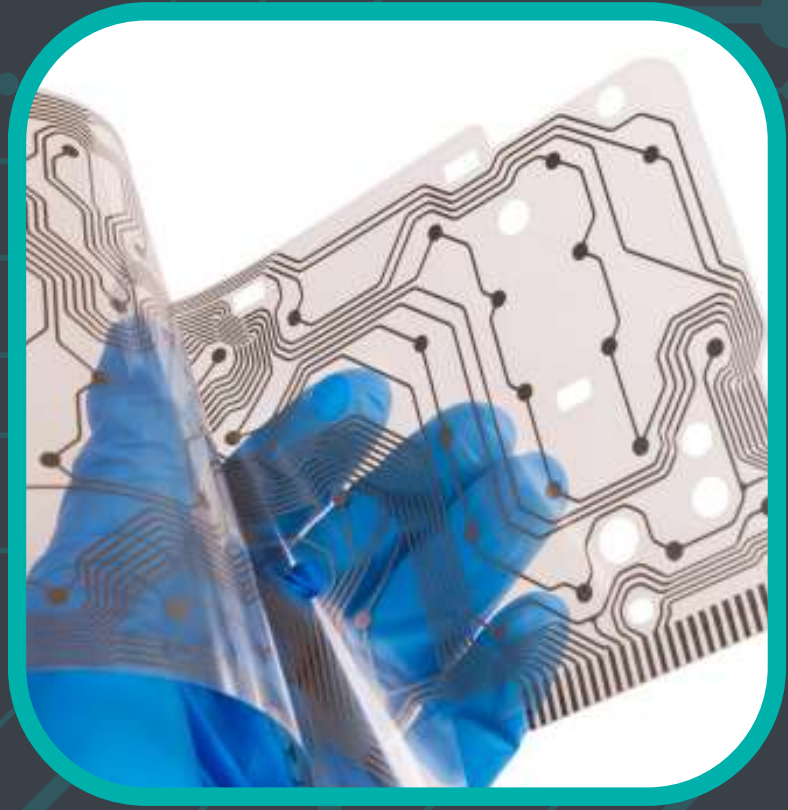
SILGA CAPABILITIES



- High print accuracy for thin lines
- Multilayer printing
- 40 μm thickness for touch foils
- Different types of curing (IR, UV, convection)

BENEFITS

- High level of integration
- Weight reduction
- Design freedom
- Touch screen generation
- Green process
- Reduction of moving parts and wiring



APPLICATIONS



- Lights (3D shapes / OLED lamps)
- Capacitive displays / touch control panels



- Flexible Heaters
- Electroluminescens (backlighting / luminiscent inks)



- Integrated antennas



SILGA

Connect technology

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