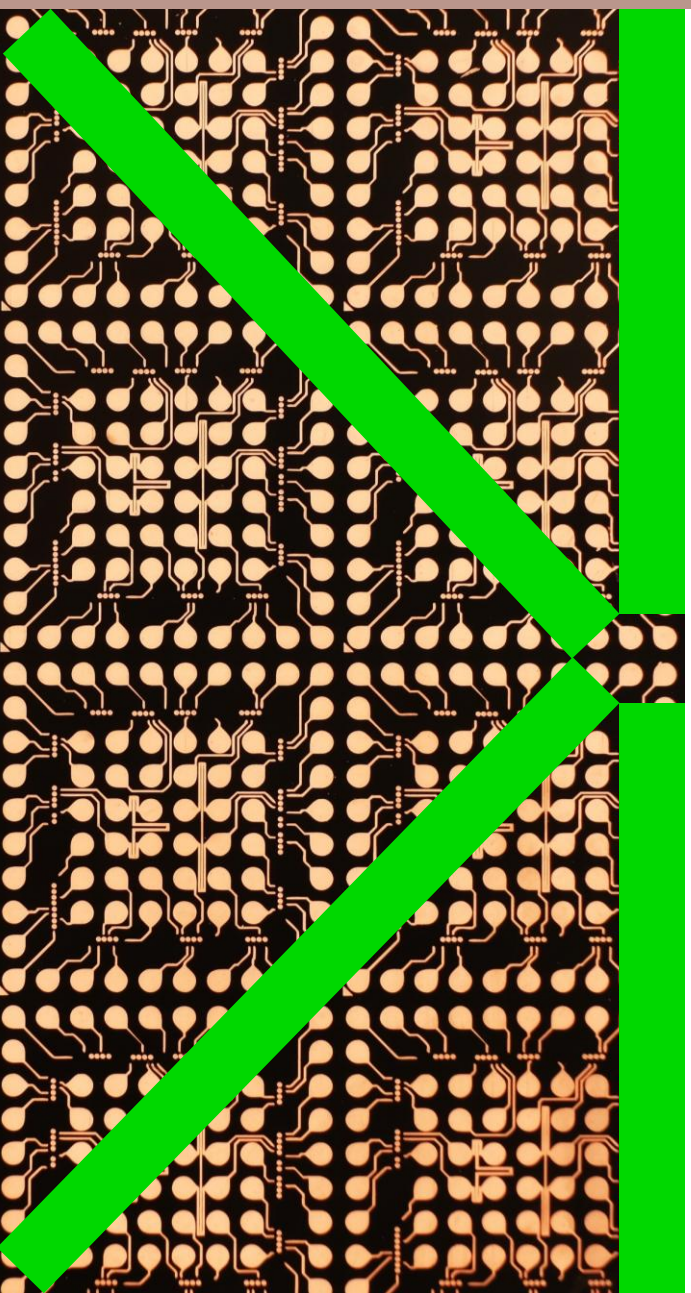
AKONEER



SSAIL Technology to Form Conductive traces

With a patented SSAIL technology, conductive traces are formed on dielectric materials (polymers, glass, ceramics, silicon).

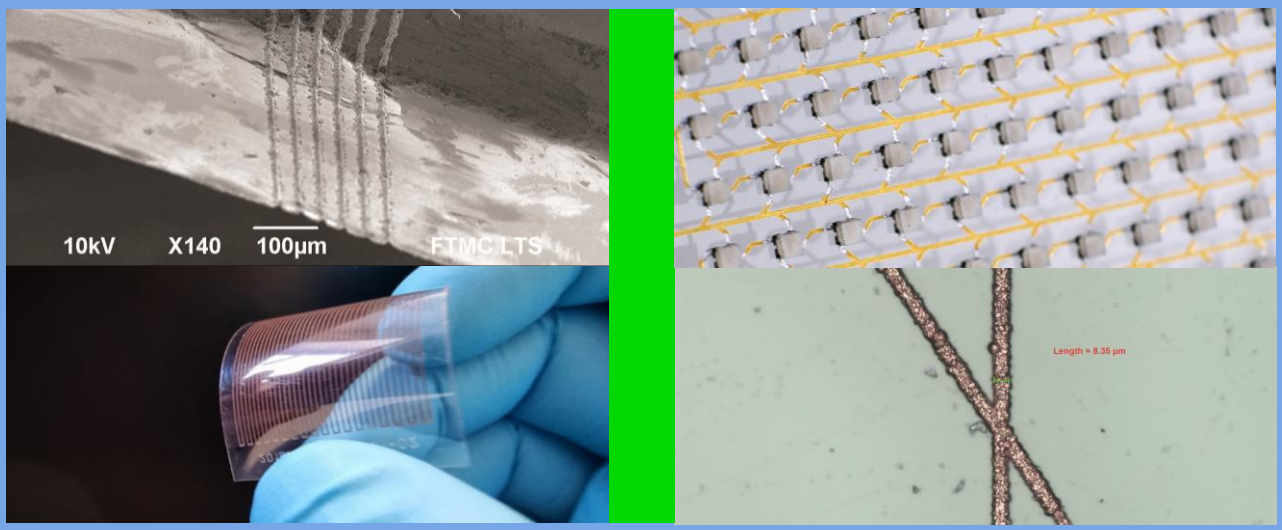
AKONEER provides SSAIL laser machines for 2D, 3D, roll-to-roll applications.

akoneer.com

FLEXIBILITY OF SHAPES

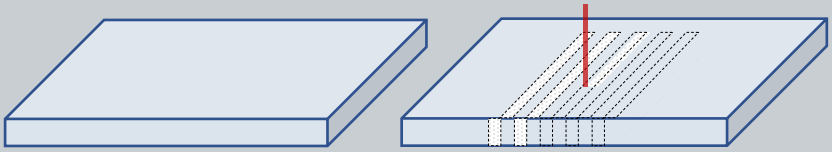
SSAIL technology enables forming conductive traces on different form factors:

- **3D surfaces**
- **Thin films**
- **Flexible materials**
- **Transparent materials**
- **From 1 um width traces to large conductive areas**



HOW DOES IT WORK?

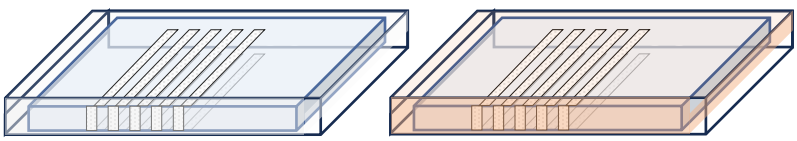
1.



Laser process on blank substrate

(including via drilling if needed)

2.

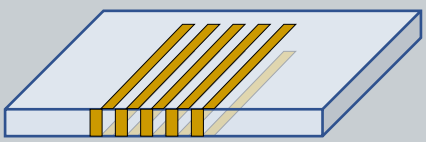


Chemical process

1) Activation

2) Electroless plating

3.



Final plated part

STANDARD MATERIALS

SSAIL technology works on standard dielectric materials: various polymers, glass, silicon, ceramics.

No metal additives are needed

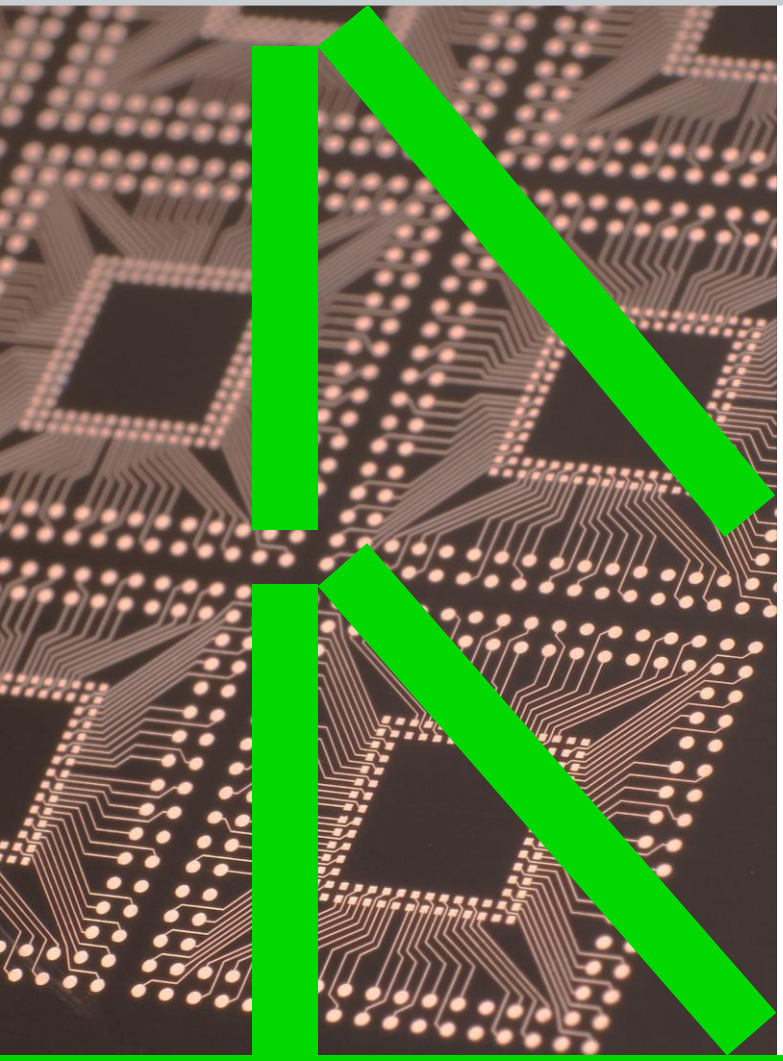
Materials tested

PC/ABS	PPS	Getinax
PA6	PF	FR-4
PVC	PI	Epoxy
PMMA	PC/ABS for 3D printing	R03003tm Laminates
PET	PTFE	SITAL ceramic
PEEK	ABF	AI203 ceramic
PPA	PA4	Glass (soda lime)
LCP	PBS	Fused Silica
PBT	PREP 200	Silicon

HIHG ADHESION STRENGTH

Conductive traces formed with SSAIL technology have a high adhesion strength and environmental resistance. This allows using it on flexible materials as well as in real-world environments.

No:	Material	Adhesion strength
1	PEEK	3610 N/cm2
2	LCP	1630 N/cm2
3	Glass	2720 N/cm2
4	Sital ceramic	730 N/cm2
5	PET	680 N/cm2
6	PMMA	1030 N/cm2
7	PC/ABS	690 N/cm2



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