Direct write printing is our core technology.

Micropen printing is the most precise and cost-effective way of printing fine lines of functional materials onto many different substrates: both 2D and 3D surfaces.

Challenge us with your application.

We can print it seamlessly, without swaging or glue; with precise conductivity; in virtually any size or shape; and on any substance.

Micropen.com

	Direct-Write Sensors	Conventionally Embedded Sensors
Design Flexibility	High	Limited
Miniaturization	High	Limited
Material Compatibility	High	Limited
Sensor Coverage	High	Limited
Customization	High	Limited
Integration	Seamless	Complex
Reliability	High	Moderate
Cost	Application dependent	Application dependent
Prototype Production Time	Fast prototyping	Slower prototypes
Applications	Complex geometries, flexible substrates, large-area sensing, custom designs	Standard form factors, rigid substrates, established sensor types

We can print sensors, resistors, conductive materials, and radiopaque markers on any substrate!

Micropen capabilities

- Electronic printing
- Material formulation
- Supply chain management
- Assembly
- Testing and inspection
- Interconnection
- Wide latitude of materials:
  - Ag
  - Au
  - Pt
  - W
  - Dielectrics
  - Ceramics
  - Polymers
  - Biocompatible materials

Micropen Strengths

Flexible, Expandable, or Highly 3D Surfaces

Patterned Ink Thickness

Fine Linewidths and Spacing

Ink Waste Cost
Especially when using expensive inks (gold, silver, platinum)

Fast Prototyping

Consult us when you need a better solution than...

- Screen Printing
- Pad Printing
- Inkjet/Aerosol Printing
- Applique Construction
- Subtractive Processes
- Metallization and etching

Micropen Certifications:

ISO 13485
AS9100D with ISO9001
RoHS and REACH compliant
FDA registration
ITAR registration

Contact Us:

micropen.com
585-624-2610
micropensales@exxelia.com

Exxelia Micropen

Direct writing sensors and conductive patterns on any surface.

Design, development, and manufacturing.

Micropen has printed sensors on these and many more shapes and sizes!

Micropen industries:

- Medical
- Analytic
- Aerospace
- Defense

EXXELIA MICROPEN