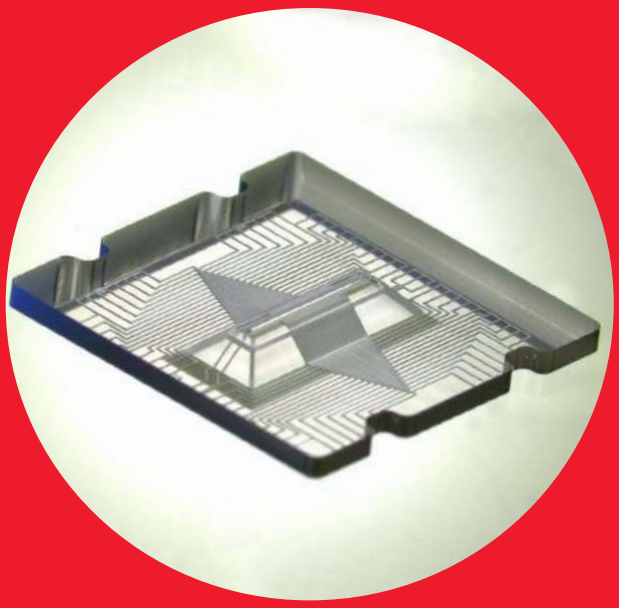
THE ART of
µMANUFACTURING

Delivering tomorrow's 3D micromanufacturing experience. **Today.**

FEMTOPRINT®
3D PRINTING FOR GLASS MICRODEVICES

Our Applications



3D ION TRAPS

ELECTRICAL CONNECTIVITY

METAL DEPOSITION

GLASS PRINTED CIRCUIT BOARDS – PCBS

THROUGH GLASS VIAS – TGVS

PHOTONIC CONNECTIVITY

QUANTUM SENSING

FEMTOPRINT®
3D PRINTING FOR GLASS MICRODEVICES

Our Solutions

The realization of complex devices as well as the transition from prototyping to scalable production is a significant hurdle for research groups and companies working in quantum technology.

FEMTOPRINT delivers solutions tailored to overcome these obstacles by offering:

3D Glass Structuring

Accurate fabrication of **micrometer-precise 3D devices.** Thickness ranges from 0.2 mm to 30 mm, wafers up to 200 mm diameter.

Material Excellence

Fused silica offers superior dielectric and thermal properties, resistance to extreme cryogenic environments and non-magnetic behavior.
Different special glass types available.

Metal deposition

Electrode **metallization** with gold (Au), titanium (Ti), chromium (Cr) and other metals to enable electrical connectivity. Sputtering and evaporator available. Hard masks, produced and assembled by FEMTOPRINT, can define complex metal patterns.

Laser welding techniques

For multi-layer bonding (glass-to-glass, glass-to-metal).

Optical Connectivity

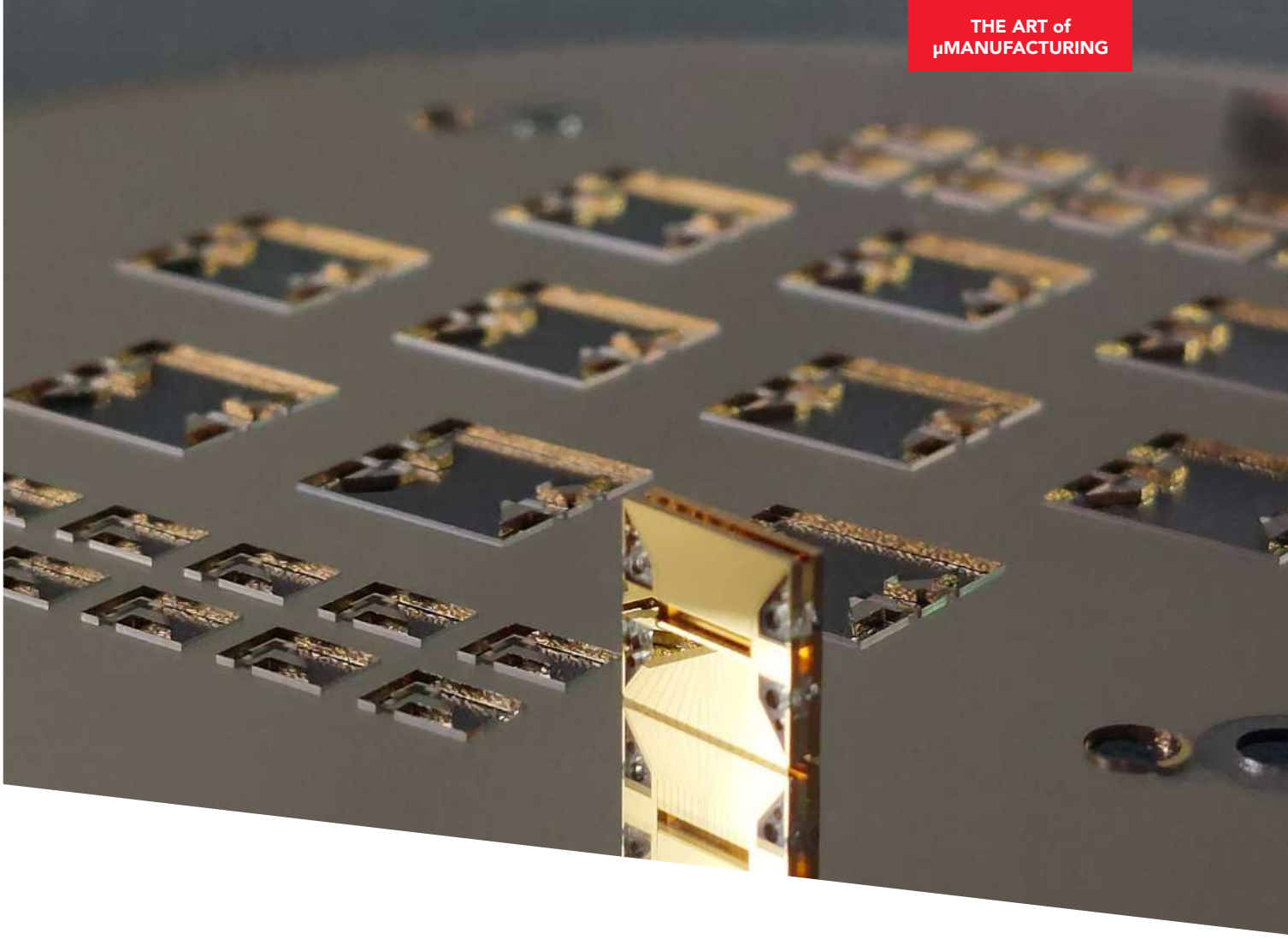
Fiber inlets, **mirrors**, and **lenses** for integrated **connectivity**.

Wafer-Based Scaling-Up

Industry-leading fabrication techniques that support the transition from laboratory-scale prototypes to high-volume manufacturing.

Functional QC (Quality Control)

Rigorous testing and validation to ensure that each component meets the defined geometrical acceptance criteria. DC electrode testing.



Our Technology

FEMTOPRINT is the industry leader in micromanufacturing 3D glass components for implantable medical devices.

With over 13 years of expertise, we've perfected ultrafast laser processing of transparent glass to meet the exacting standards of implantable technologies, from neuromodulation to diagnostics and drug delivery.

Our industrial-grade microfabrication platform uses femtosecond laser exposure combined with chemical wet etching to precisely sculpt **3D glass structures**.

At FEMTOPRINT, we drive quantum innovation with expert engineering and a custom microfabrication platform, enabling production of complex hardware to transform concepts into groundbreaking quantum technologies.

FEMTOPRINT®
3D PRINTING FOR GLASS MICRODEVICES

Your leading global provider of advanced laser processing for glass microdevices.

FEMTOPRINT is a Swiss high-tech provider of advanced, ultrafast laser-processing for 3D glass microdevices. Offering contract development and manufacturing services, we specialize in high-precision, 3D glass micro-fabrication.

Quality Certifications

ISO 13485 and ISO 9001
RoHS and REACH

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DISCOVER MORE

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