



leti
cea tech

TECHNOLOGY
RESEARCH
INSTITUTE

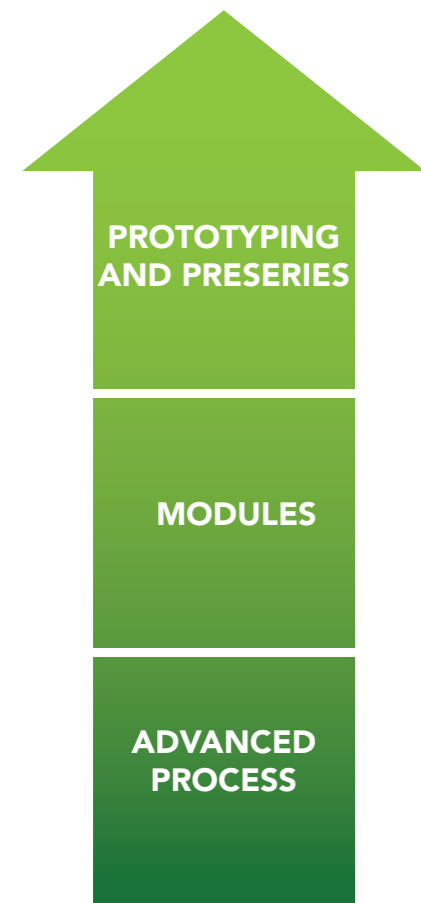
LETI 3S, SILICON SPECIALTY SOLUTIONS

A collaborative solution to meet
your unique prototyping needs



A FLEXIBLE & RAPID RESPONSE TO YOUR PROCESSING NEEDS

Leti 3S is a collaborative solution for businesses (fabless, foundries with a limited processes offer, SMEs, research centers...). 3S offers a flexible and rapid access to advanced processing relying on Leti's technological platforms to meet your unique prototyping needs.



Prototype your design in a real fab environment:

- Access advanced technologies from nanometers (e-beam) to microns (TSVs, MEMS)
- Advanced process integration
- Small pilot production runs are also available on demand to stabilize your process before transferring it to a commercial foundry

Rely on our customized or standard modules:

- Litho/DRIE/HF Release
- Bonding on cavities
- Damascene processes
- Various TSV processes
- Microbumps

Extend your process offer through advanced single step processes:

- Bonding, grinding, and dicing
- Deposition: dielectric, metal, ECD, magnetic
- Clean: FS/BS
- Lithography: e-beam, aligner, stepper, scanner
- Etching: RIE, DRIE, IBE
- Implantation, epitaxy, and diffusion

+ ACCESS TO EQUIPMENTS

Validate your consumables on state-of-the-art equipments operated by Leti experts with on-demand access to manufacturing and characterization tools (like SEM, TEM, and TXRF).

+ STATE-OF-THE-ART CLEAN-ROOMS

A unique 8,500 sq. m. infrastructure, gathering on a single site:

- 200 mm and 300 mm CMOS lines
- 200 mm MEMS line
- 200 mm MEMS and CMOS co-integration
- 300mm 3D integration
- in-line and off-line characterization platform

+ SOME LETI 3S SUCCESS STORIES



Suspended micro-channel resonator for MIT:

- Applications: Mass weighing in 10-19g range
- Successful qualification in MIT lab
- New R&D project on-going

Micro cooling devices for CERN:

- Application: LHCb upgrade
- First batch qualified by CERN. Pressure test pump limits exceeded (700b)
- New device installed and running on CERN Gigatracker (NA62)

Silicon micro-needles for Debiotech:

- Applications: Vaccines (painless, small product quantities, more efficient)
- Fabrication in pre-production mode
- Clinical tests on humans in validation phase



STATE-OF-THE-ART FACILITIES

One of Europe's leading research institutes, Leti proposes world-class equipment, in Grenoble, France and facilities:

- 8,500 sq.m.
- up to class 1 clean-room facilities
- >500 advanced instruments and machines
- 24/7 operations



COMMITTED TO QUALITY

A leading research institute serving manufacturers, Leti has earned ISO 9001 quality certification.



IP PROTECTION

Leti is committed to protecting customers' intellectual property and maintaining the confidentiality of all projects.



■ USA Office

■ Leti
Head Office

■ Japan Office

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ABOUT LETI

Leti is a technology research institute at CEA Tech and a recognized global leader in miniaturization technologies enabling smart, energy-efficient and secure solutions. Committed to innovation, its teams create differentiating solutions for Leti's industrial partners.

By pioneering new technologies, Leti enables innovative applicative solutions that ensure competitiveness in a wide range of markets. Leti tackles critical, current global issues such as the future of industry, clean and safe energies, health and wellness, safety & security...

Leti's multidisciplinary teams deliver solid micro and nano technologies expertise, leveraging world-class pre-industrialization facilities.

For 50 years, the institute has been building long-term relationships with its industrial partners providing tailor-made solutions and a clear intellectual property policy.

INTERESTED IN THIS TECHNOLOGY?

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