

# PICS project +



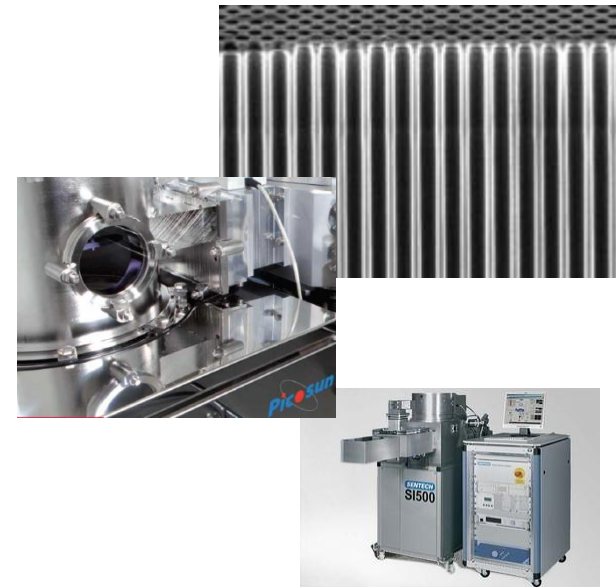
## Future of Integrated Capacitors

Development of innovative ALD materials and tools for high density 3D integrated capacitors

The two-year EU-funded PICS project is designed to develop a disruptive technology that results in a new world record for integrated capacitor densities combined with higher breakdown voltages.

The consortium will address all related technological challenges and set up a cost-effective industrial solution. Picosun will develop ALD tools adapted to IPDiA's 3D trench capacitors. SENTECH Instruments will provide a new solution to more accurately etch high-K dielectric materials. CEA-Leti and Fraunhofer CNT will help the SMEs to create innovative technological solutions. Finally, IPDiA will manage the industrialization of these processes.

- + World record 500nF/mm<sup>2</sup> capacitors into silicon
- + High stability and reliability, low leakage
- + ALD batch equipment to reduce cost-of-ownership
- + Leading edge technology for thick high-K materials



**PICS project**



IPDiA, located in Caen (France), is a preferred supplier of high performance, high stability and high reliability silicon passive components to customers in the medical, automotive, communication, computer, industrial, and defense/aerospace markets.



Picosun is the world leading provider of ALD solutions for global industries. Today, PICOSUN™ ALD systems are in daily production use in numerous prominent industries around the globe. Picosun is based in Finland.



SENTECH Instruments GmbH located in Berlin (Germany) develops, manufactures, and sells worldwide advanced quality instrumentation for Plasma Process Technology, Thin Film Measurement, and Photovoltaics.



Fraunhofer CNT is a CNT German research lab that develops advanced 300 mm semiconductor process solutions for Front-End and Back-End-of Line applications on state-of-the-art process- and analytical equipment.



Leti is a French research-and-technology organization located in Grenoble and focused on creating value and innovation through technology transfer to its industrial partners. It specializes in nanotechnologies and their applications, from wireless devices and systems, to biology, healthcare and photonics.

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#### PICS Contact Information

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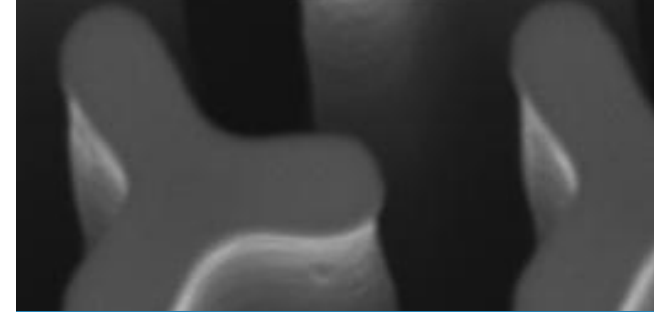
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<http://www.fp7-pics.eu>