Applied Materials and CEA-Leti Expand Joint Lab To Drive Innovation in Specialty Chips

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Based at CEA-Leti, Collaboration Focuses on Materials Engineering Solutions To Enable More Energy-Efficient AI Data Centers

SANTA CLARA, Calif. and GRENOBLE, France, June 16, 2025 (GLOBE NEWSWIRE) -- Applied Materials, Inc. and CEA-Leti today announced the next phase of their longstanding collaboration to accelerate innovation in specialty semiconductors. Under a memorandum of understanding (MOU), the organizations plan to expand their joint lab and develop materials engineering solutions to address emerging infrastructure challenges in AI data centers.

The joint lab is focused on device innovations for chipmakers serving ICAPS markets (IoT, Communications, Automotive, Power and Sensors). These specialty chips are used in a wide range of applications – from industrial automation to electric vehicles – and they play a critical role managing data and power distribution within data centers. Growing resource demands in AI infrastructure have highlighted the need for a new wave of innovation in ICAPS chips to enable more energy-efficient computing.

Under the new arrangement, Applied and CEA-Leti plan to expand the lab with new equipment and capabilities that move beyond individual process steps to include full-flow development of specialty devices. Additionally, the lab would be equipped with state-of-the-art advanced packaging tools to support heterogeneous integration of chips across different wafer types and process nodes – enabling entirely new classes of specialty devices for a range of next-generation applications.

The joint facility features several Applied Materials wafer processing systems together with CEA-Leti's world-class capabilities for evaluating performance of new materials and device validation. The upgraded lab is expected to strengthen the chipmaking ecosystem in France by further expanding the technology hub in Grenoble, a leading site for collaborative innovation across government, academia and industry. The lab also marks an extension of Applied's global EPIC Platform, a new high-velocity innovation model designed to accelerate commercialization of new chip technologies. Applied and CEA-Leti will be able to leverage the R&D work taking place across Applied's global innovation centers to drive progress in specialty semiconductor technologies.

"Applied Materials and CEA-Leti have a long history of successful collaboration, and we are excited to strengthen our capabilities for accelerating innovation and commercialization of next-generation specialty chips," said Aninda Moitra, corporate vice president and general manager of Applied Materials' ICAPS business. "Our combined expertise will help foster breakthroughs and push the boundaries of semiconductor innovation, contributing to sustainable advancements in a range of critical applications for the AI era."

Sébastian Dauvé, CEO of CEA-Leti, said the first phase of the expanded collaboration laid important groundwork for addressing materials-engineering challenges of specialty semiconductor devices.

"Building on this momentum, the joint lab's new focus on energy-efficient solutions for AI data-center infrastructure reflects our shared commitment to making technological progress that meets both industrial and societal needs. The extended collaboration also leverages our complementary strengths to accelerate innovation at the system level, while supporting sustainable growth in France's semiconductor ecosystem," he said.

About Applied Materials
Applied Materials, Inc. (Nasdaq: AMAT) is the leader in materials engineering solutions used to produce virtually every new chip and advanced display in the world. Our expertise in modifying materials at atomic levels and on an industrial scale enables customers to transform possibilities into reality. At Applied Materials, our innovations make possible a better future. Learn more at www.appliedmaterials.com.

About CEA-Leti (France)
CEA-Leti, a technology research institute at CEA, is a global leader in miniaturization technologies enabling smart, energy-efficient and secure solutions for industry. Founded in 1967, CEA-Leti pioneers micro-& nanotechnologies, tailoring differentiating applicative solutions for global companies, SMEs and startups. CEA-Leti tackles critical challenges in healthcare, energy and digital migration. From sensors to data processing and computing solutions, CEA-Leti's multidisciplinary teams deliver solid expertise, leveraging world-class pre-industrialization facilities. With a staff of more than 2,000 talents, a portfolio of 3,200 patents, 11,000 sq. meters of cleanroom space and a clear IP policy, the institute is based in Grenoble, France, and has offices in Silicon Valley, Brussels and Tokyo. CEA-Leti has launched 75 startups and is a member of the Carnot Institutes network. Follow us on www.leti-cea.com and @CEA_Leti.

Technological expertise
CEA has a key role in transferring scientific knowledge and innovation from research to industry. This high-level technological research is carried out in particular in electronic and integrated systems, from microscale to nanoscale. It has a wide range of industrial applications in the fields of transport, health, safety and telecommunications, contributing to the creation of high-quality and competitive products.

For more information: www.cea.fr/english

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