

## **CEA-Leti and MAPPER to Launch “IMAGINE” Program with Delivery Of MAPPER’s Massively Parallel Electron Beam Platform**

GRENOBLE, France, and DELFT, The Netherlands — July 21, 2009 — CEA-Leti and MAPPER Lithography announce today that MAPPER has delivered one of its massively parallel electron beam platforms to CEA-Leti.

This delivery is part of the collaboration program between MAPPER and CEA-Leti targeting development of maskless lithography for IC manufacturing for 22nm and beyond. The 300mm, 110-beam platform will be upgraded over the coming two years to reach industrial maturity. The MAPPER platform is the core technology on which the three-year IMAGINE program is built. This program provides the world’s major chip manufacturers with the opportunity to assess the maskless lithography technology in a real manufacturing environment. In addition, this program will develop and qualify the complete infrastructure from data preparation to process integration, in preparation for its industrial introduction.

“July 2009 is an important month in MAPPER’s history, since we will be shipping our first two machines,” said Christopher Hegarty, MAPPER’s CEO. “Given CEA-Leti’s extensive expertise in e-beam lithography, we are delighted that one of our machines is installed at their fab in line with our roadmap. We are looking forward to working with industry partners to get this technology to a manufacturing level.”

Olivier Demolliens, head of Nanotec at CEA-Leti said, “This is a very important step as it is the first attempt to install such equipment in an industrial environment, and we are very excited to do it at CEA-Leti. By sharing developments with our partners, we are on the way to establishing the potential of the multibeam technology and to offer new promising perspectives to the semiconductor industry.”

### **About CEA-Leti:**

CEA is a French Research and Technology Organisation, with activities in three main areas: Energy, Technologies for Information and Healthcare, and Defence and Security. Within CEA, the Laboratory for Electronics & Information Technology (CEA-Leti) works with companies in order to increase their competitiveness through technological innovation and transfers. Leti is focused on micro and nanotechnologies and their applications, from wireless devices and systems, to biology and healthcare or photonics. Nanoelectronics and Microsystems (MEMS) are at the core of its activities. As a major player in MINATEC excellence centre, Leti operates 8,000 m<sup>2</sup> state-of-the-art clean rooms, on 24/7 mode, on 200 mm and 300 mm wafer standards. With 1,200 employees, Leti trains more than 150 Ph.D. students and hosts 200 assignees from partner companies. Strongly committed to the creation of value for the industry, Leti puts a strong emphasis on Intellectual Property and owns more than 1,400 patent families. In 2008, contractual income covered more than 75% of its budget worth 205 M€. For more information, visit [www.leti.fr](http://www.leti.fr)

### **About MAPPER Lithography:**

MAPPER’s offices are located in Delft, The Netherlands, near Delft University of Technology, one of the company’s shareholders. MAPPER has a headcount of 170 people. Shareholders of MAPPER also include professional investors – Capital-C Ventures, KT Venture Group, Hoving and Partners, Quest for Growth and KBC Private Equity - and private investors.

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MAPPER's technology:

MAPPER develops lithography machines for the chip industry. These machines utilize a new and innovative technology with which the chips of the future can be made cost effectively. MAPPER's machine provides a highly cost-effective way of making the next generation of chips because it makes the mask redundant and combines high resolution and high productivity. Current lithography machines use photographic techniques to create minute electrical circuits smaller than 1/100th of a human hair on a silicon wafer. They use a mask which contains the blueprint of the chip and transfer this pattern on to a photosensitive layer (comparable to a photograph being exposed on film).

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