



SCREEN Semiconductor Solutions and IBM Research to collaborate on advanced logic process research in Albany, New York

Kyoto, Japan – October 12, 2016 – SCREEN Semiconductor Solutions Co., Ltd. (SCREEN) is preparing to install our first of three key tool sets into the IBM Research (IBM) Albany Nanotech, Semiconductor Research Center this year. The SCREEN single wafer clean, laser anneal and coat/develop track equipment suite will support IBM's advanced semiconductor technology research, and complements the EUV Center of Excellence tool set in Albany, New York.

"IBM is committed to an aggressive research agenda that pushes the limits of semiconductor technology," said Mukesh Khare, vice president of IBM Research's Semiconductor Group. "Innovations in materials, processes and device structures are essential to accelerate technology research in order to meet the demands of future cloud computing and cognitive systems."

"We are very pleased to be chosen by IBM as they research advanced logic semiconductors," noted Tadahiro Suhara, President of SCREEN Semiconductor Solutions, "For us this is a testament to the value our SCREEN equipment technology and resources bring to advance semiconductor process development in multiple fields: wet clean, thermal anneal, and coat/develop track."

The first of the SCREEN equipment trio installation for IBM will be the Aquaspin SU-3200 which was designed to develop highly selective, residue free and damage free wet clean process applications in semiconductor fabrication for advanced nodes including 7nm and beyond. IBM will also evaluate nanosecond-scale UV laser anneal applications, including melt activation and re-crystallization of critical layers, with the LT-3100 system delivery from Laser Systems and Solutions of Europe (LASSE), SCREEN's subsidiary based in France. We anticipate upon favorable results that IBM will integrate the DT-3000 DUO Track system to advance Directed Self-Assembly (DSA), Spin-On Dielectrics (SOD) and under layer coatings with the EUV Center of Excellence lithography patterning tool set.

These three new SCREEN tool sets are expected to be delivered before yearend to the IBM Research, Albany Nanotech site cleanrooms within the SUNY Polytechnic Institute's Colleges of Nanoscale Science and Engineering (CNSE). This 300 mm wafer size equipment set for IBM will expand SCREEN's presence in Albany.

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About IBM Research

For more than seven decades, IBM Research has defined the future of information technology with more than 3,000 researchers in 13 labs located across six continents. Scientists from IBM Research have produced six Nobel Laureates, 10 U.S. National Medals of Technology, five U.S. National Medals of Science, six Turing Awards, 19 inductees in the National Academy of Sciences and 19 inductees into the U.S. National Inventors Hall of Fame. For more information about IBM Research, visit www.ibm.com/research.

About SCREEN Semiconductor Solutions Co., Ltd.

SCREEN Semiconductor Solutions has been established as a group company of SCREEN Holdings inheriting the semiconductor equipment business from its predecessor, Dainippon Screen. SCREEN is a specialized manufacturer in various areas such as wafer cleaning equipment, lithography equipment and thermal anneals, and is one of the world's top 10 equipment suppliers to the semiconductor manufacturing industry.

For more information, please visit www.screen.co.jp/eng/spe.

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