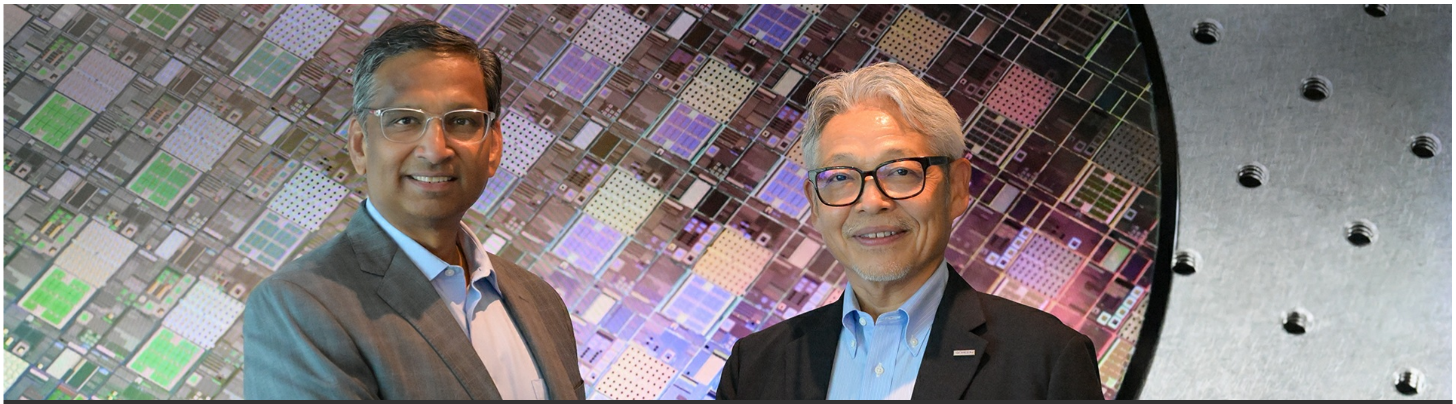
IBM Newsroom

SCREEN and IBM Sign Agreement for Next-Generation EUV Lithography Cleaning Process Development

Agreement builds on more than a decade of collaboration between the two companies



On the left is Mukesh Khare, GM of IBM Semiconductors and VP of Hybrid Cloud, IBM, and on the right is Akihiko Okamoto, Representative Director and President of SCREEN Semiconductor Solutions.

ALBANY, NY and KYOTO, JAPAN, September 24, 2025 – SCREEN Semiconductor Solutions Co., Ltd. and IBM (NYSE:IBM) today announced an agreement to develop cleaning processes for next-generation EUV lithography. This agreement builds on a previous joint development collaboration for innovative cleaning processes that enabled the current generation of nanosheet device technology.

In recent years, the adoption of EUV (Extreme Ultraviolet) lithography has been accelerating to meet the growing demand for miniaturization in advanced semiconductor manufacturing processes. In particular, High NA (High Numerical Aperture) EUV, a next-generation exposure technology, is gaining attention as an essential technology beyond the 2nm node. In these advanced EUV exposure processes, even minute particles or scratches on the wafer—previously considered negligible—can negatively impact patterning performance, making the cleaning process more critical than ever.

To address these challenges, the two companies have signed an agreement to focus on developing cleaning technologies for High NA EUV. The collaboration combines IBM’s expertise in semiconductor process integration and SCREEN’s leading-edge wafer cleaning tools.

"High NA EUV technology is critical as we look to develop smaller, more powerful semiconductors for the age of AI,” said **Mukesh Khare, GM of IBM Semiconductors and VP of Hybrid Cloud, IBM** “We are thrilled to expand our collaboration with SCREEN to ensure that IBM and our ecosystem partners can benefit from this technology innovation.”

"SCREEN is excited to deepen our collaboration with IBM to develop cleaning technologies that meet the stringent demands of High NA EUV lithography. By combining SCREEN precision cleaning expertise with IBM’s full stack development flow, we aim to deliver robust solutions that enable our customers to realize the potential of sub-2nm manufacturing," said **Akihiko Okamoto, Representative Director and President of SCREEN Semiconductor Solutions**.

Through this joint development agreement, IBM and SCREEN will work to further accelerate the development of cleaning technologies for advanced semiconductor manufacturing using High NA EUV lithography and to provide solutions that maximize added value for device manufacturers.

ABOUT SCREEN

SCREEN Semiconductor Solutions Co., Ltd. is a leading manufacturer of wafer processing equipment for the global semiconductor market. We consistently hold the No.1 global share* in wafer cleaning equipment and deliver a wide range of solutions that underpin semiconductor production, including lithography, annealing, measurement/inspection systems. SCREEN offers an extensive lineup, from our 300 mm flagship models that deliver superior performance and productivity for the cutting-edge device market to the systems tuned for the IoT devices that handle substrates of various shapes and sizes of 200 mm or smaller.

* Based on SCREEN in-house research

ABOUT IBM

IBM is a leading provider of global hybrid cloud and AI, and consulting expertise. We help clients in more than 175 countries capitalize on insights from their data, streamline business processes, reduce costs and gain the competitive edge in their industries. Thousands of governments and corporate entities in critical infrastructure areas such as financial services, telecommunications and healthcare rely on IBM's hybrid cloud platform and Red Hat OpenShift to affect their digital transformations quickly, efficiently and securely. IBM's breakthrough innovations in AI, quantum computing, industry-specific cloud solutions and consulting delivers open and flexible options to our clients. All of this is backed by IBM's long-standing commitment to trust, transparency, responsibility, inclusivity and service.

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Additional assets available online: Photos

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