

July 9, 2025

Smartkem

Smartkem Announces Preliminary Joint Development Agreement with Manz Asia for Advanced Computer and AI Chip Packaging Solutions

Joint Development Agreement builds on ongoing collaboration with Manz Asia

MANCHESTER, England, July 9, 2025 /PRNewswire/ -- Smartkem (Nasdaq: SMTK), which is seeking to change the world of electronics with a new class of transistor technology, today announced that it has entered into a preliminary Joint Development Agreement (JDA) with Manz Asia, a pioneer in advanced packaging equipment for the semiconductor industry, which, when finalized will focus on the co-development of next generation dielectric ink solutions for advanced packaging manufacturing, particularly tailored for AI chip packaging applications.

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Smartkem Chairman and CEO, Ian Jenks, comments: "This joint development agreement builds on our collaboration with Manz Asia which has already resulted in our first demonstration at SEMICON® SEA 2025 of an advanced inkjet metalization process for packaging chips for production. Together, we intend to develop scalable, high-performance solutions that address the critical bottlenecks particularly in advanced computer and AI chip packaging. By combining Smartkem's unique semiconductor materials with Manz's precision inkjet technology, we expect to create new manufacturing paradigms that address the demand for 12" wafer-level packaging solutions as well as extend beyond wafer-based limitations to open the door to efficient, large-area panel packaging. If successful our efforts will result in higher yield and lower cost per packaged chip, which we believe is critical for data centers deploying tens of thousands of AI accelerators."

Manz Asia General Manager, Robert Lin, comments, "By combining Smartkem's expertise in material science with Manz Asia's engineering excellence in semiconductor manufacturing equipment, we believe that this JDA will fast-track the industrial adoption of dielectric ink technology, delivering new levels of scalability, resolution, and reliability for future chip integration. Dielectric inks play a critical role in back-end-of-line (BEOL) processes, particularly in top metal layer insulation and redistribution layer (RDL) patterning for advanced packaging. Smartkem's innovative dielectric formulations offer high-resolution patterning, robust film integrity, and excellent chemical compatibility – essential for supporting today's complex interconnect architectures."

As demand for AI computing accelerates, advances in 12" wafer-level packaging and large-area panel packaging could offer a transformative path forward for data center infrastructure. By moving beyond the limitations of traditional wafer-based approaches, panel-level

packaging enables higher chip density, faster interconnects, improved thermal management, and more sustainable manufacturing processes. Smartkem and Manz believe that these benefits are essential to scaling the next generation of AI hardware, delivering greater performance and efficiency while reducing cost and environmental impact.

The JDA is preliminary only, is not-binding on the parties and there can be no assurance as to whether or when a definitive development agreement will be executed by the parties or as to the ultimate terms or outcome of any such project.

About Smartkem

Smartkem is seeking to change the world of electronics with a new class of transistors developed using its proprietary advanced semiconductor materials. Our TRUFLEX® semiconductor polymers enable low temperature printing processes that are compatible with existing manufacturing infrastructure to deliver low-cost, high-performance displays. Our semiconductor platform can be used in a range of display technologies including MicroLED, LCD and AMOLED, as well as in applications in advanced computer and AI chip packaging, sensors, and logic.

Smartkem designs and develops its materials at its research and development facility in Manchester, UK and provides prototyping services at the Centre for Process Innovation (CPI) in Sedgefield, UK. It operates a field application office in Hsinchu, Taiwan, close to collaboration partner, The Industrial Technology Research Institute (ITRI). Smartkem is developing a commercial-scale production process and Electronic Design Automation (EDA) tools to demonstrate the commercial viability of manufacturing a new generation of displays using its materials.

The company has an extensive IP portfolio including 140 granted patents across 17 patent families, 14 pending patents and 40 codified trade secrets.

For more information, visit our [website](#) or follow us on [LinkedIn](#).

About Manz Asia

Manz Asia is a leading manufacturer of advanced semiconductor equipment, driving technological innovation and process excellence within the CoPoS (CoWoS panelization) technology framework for panel-level packaging.

We offer comprehensive equipment solutions encompassing wet chemistry, plating, digital printing, automation, and proprietary software integration for Redistribution Layer (RDL) process—from lab-scale to mass production. Our technologies support key applications in Fan-Out Panel-Level Packaging (FOPLP), Through Glass Via (TGV), and IC substrates, covering critical stages of semiconductor packaging.

By enhancing production efficiency, optimizing process quality, and strengthening market competitiveness, Manz Asia empowers the semiconductor industry to achieve higher standards of excellence.

For more information, please visit [website](#) or follow us on [LinkedIn](#).

Forward-Looking Statements

All statements in this press release that are not historical are forward-looking statements, including, among other things, its market position and market opportunity, expectations and plans as to its product development, manufacturing and sales, and relations with its partners and investors. These statements are not historical facts but rather are based on Smartkem, Inc.'s current expectations, estimates, and projections regarding its business, operations and other similar or related factors. Words such as "may," "will," "could," "would," "should," "anticipate," "predict," "potential," "continue," "expect," "intend," "plan," "project," "believe," "estimate," and other similar or related expressions are used to identify these forward-looking statements, although not all forward-looking statements contain these words. You should not place undue reliance on forward-looking statements because they involve known and unknown risks, uncertainties, and assumptions that are difficult or impossible to predict and, in some cases, beyond the Company's control. Actual results may differ materially from those in the forward-looking statements as a result of a number of factors, including those described in the Company's filings with the Securities and Exchange Commission. The Company undertakes no obligation to revise or update information in this release to reflect events or circumstances in the future, even if new information becomes available.

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