

FOR THE MEDIA

ASMPT and IBM Deepen Collaboration to Advance Bonding Methods for Chiplet Packages for AI

Latest agreement aims to advance thermocompression and hybrid bonding methods for chiplet packages

Singapore and Armonk, New York, July 24, 2024 – ASMPT and IBM today announced a renewed agreement to extend their collaboration on the joint development of the next advancement of chiplet packaging technologies. Through the agreement, the two companies will work together to advance thermocompression and hybrid bonding technology for chiplet packages, using ASMPT's next generation of Firebird TCB and Lithobolt hybrid bonding tools.

Chiplets deconstruct SOCs into their composite parts, creating smaller chips that can then be packaged together to operate as a single system, to provide potential benefits that can include improved energy efficiency, faster system development cycle time, and reduced costs. However, packaging advances are needed to move chiplets from research to mass production more quickly and efficiently, driven by the rapid pace of innovation in AI computing.

This latest agreement builds on an existing collaboration between ASMPT and IBM, resulting last year in the debut of a new hybrid bonding approach* that optimizes bonding quality between two chiplets. Now, they will continue to work together on the development of bonding technologies for chiplet packages.

"IBM has been at the forefront of developing advanced packaging technology for the age of AI," said Huiming Bu, Vice President of IBM Semiconductors Global R&D and Albany Operations, IBM Research. "We are proud to continue our work with ASMPT to advance chiplet packaging technology to pave the way for smaller, more powerful, and more energy efficient chips."

“We are excited to build on our strong relationship with IBM to drive the frontiers of Advanced Packaging in tandem with accelerating innovations in artificial intelligence,” said Lim Choon Khoo, Senior Vice President, ASMPT. “We are pleased to work with IBM to advance next generation packaging and Heterogeneous Integration solutions for the AI era.”

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. More than 4,000 government 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 deliver 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. Visit ibm.com for more information.

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About ASMPT Limited (“ASMPT”)

ASMPT Limited is a leading global supplier of hardware and software solutions for the manufacture of semiconductors and electronics. Headquartered in Singapore, ASMPT's offerings encompass the semiconductor assembly & packaging, and SMT (surface mount technology) industries, ranging from wafer deposition to the various solutions that organise, assemble and package delicate electronic components into a vast range of end-user devices, which include electronics, mobile communications, computing, automotive, industrial and LED (displays). ASMPT partners with customers very closely, with continuous investment in R&D helping to provide cost-effective, industry-shaping solutions that achieve higher productivity, greater reliability, and enhanced quality.

ASMPT is listed on the Stock Exchange of Hong Kong (HKEX stock code: 0522), and is one of the constituent stocks of the Hang Seng Composite MidCap Index under the Hang Seng Composite Size Indexes, the Hang Seng Composite Information Technology Industry Index under the Hang Seng Composite Industry Indexes, the Hang Seng Corporate Sustainability Benchmark Index, and the Hang Seng HK 35 Index.

To learn more about ASMPT, please visit us at asmpt.com.

About ASMPT Semiconductor Solutions (“ASMPT SEMI”)

ASMPT SEMI is the leading supplier in advanced packaging and semiconductor assembly solutions. With a commitment to innovation and customer satisfaction, ASMPT SEMI provides a comprehensive range of products and services that cater to the evolving needs of the microelectronics industry. Their expertise spans across areas such as flip-chip and wafer-level packaging, advanced interconnect technologies, and more. ASMPT SEMI's cutting-edge solutions enable customers to achieve higher performance, increased reliability, and improved cost-efficiency when producing their semiconductor devices.

For more information about ASMPT SEMI, visit semi.asmpt.com.

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