FACT SHEET

A*STAR’S INSTITUTE OF MICROELECTRONICS AND NEXGEN ANNOUNCE NEW WAFER APPLICATIONS JOINT LABORATORY IN SINGAPORE

31 May 2021

Singapore - A*STAR’s Institute of Microelectronics (IME) and NexGen Wafer Systems (NexGen) have established a S$9 million wafer applications joint laboratory to develop chemical wet etching and wafer substrate thinning processes for semiconductor IC fabrication and 3D wafer level packaging technology.

NexGen, a local small and medium-sized enterprise (SME) that develops, manufactures, markets, and services a line of unique semiconductor processing equipment for chipmakers, will contribute two of their most advanced systems that are capable of the latest wet etching process (MG22) and substrate measurement (ATMS200).

IME will be contributing its facilities, intellectual property and research and development (R&D) experts to work with NexGen to establish the tools and processes for advanced wet etching chemistry in the area of IC fabrication and 3D wafer level packaging.

Through this collaboration, IME can further develop its research priorities, such as the development of novel etching techniques, process and chemistries for heterogeneous integration, sensor and MEMS, and power electronics applications.

The five-year collaboration aims to strengthen the Singapore semiconductor ecosystem and attract more industry players once the chemical application lab setup is completed by Q3 2021. SMEs will have the opportunity to develop more capabilities for next generation devices.

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About the Institute of Microelectronics (IME)

The Institute of Microelectronics (IME) is a research institute of the Agency for Science, Technology and Research (A*STAR). Positioned to bridge the R&D between academia and industry, IME's mission is to add value to Singapore's semiconductor industry by developing strategic competencies, innovative technologies and intellectual property; enabling enterprises to be technologically competitive; and cultivating a technology talent pool to inject new knowledge to the industry. Its key research areas are in Heterogeneous Integration, System-in-Package, Sensor, Actuators and Microsystems, RF & mmWave, SiC/GaN-on-SiC Power Electronics, and MedTech. For more information on IME, please visit [www.ime.a-star.edu.sg](http://www.ime.a-star.edu.sg).

About the Agency for Science, Technology and Research (A*STAR)

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