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**EV GROUP AND THE INSTITUTE OF MICROELECTRONICS IN SINGAPORE PARTNER TO ADVANCE THROUGH-SILICON VIA PROCESS DEVELOPMENT FOR 3D IC INTEGRATION**

**ST. FLORIAN, AUSTRIA and SINGAPORE, July 8, 2010** – [EV Group \(EVG\)](#), a supplier of wafer bonding equipment for the MEMS, nanotechnology and semiconductor markets, and the [Institute of Microelectronics \(IME\)](#), a research institute of the [Agency for Science, Technology and Research \(A\\*STAR\)](#), today announced that they have entered into a two-year cooperation agreement to advance 3D IC integration technologies. 3D IC offers more flexibility in the designs. By minimizing interconnect length, 3D IC can operate at higher clock rates and consume less power. The development in 3D IC will also significantly simplify chip-to-chip communications and the data transfer among the processing elements, enabling faster signal/data throughput so that high-frequency and high-transfer rates can be achieved.

This joint development is set to enhance IME's 3D IC research and development capabilities in wafer bonding, lithography and chip stacking for 200-mm and 300-mm through-silicon via (TSV) process development. With this agreement, IME and EVG will jointly conduct process research and development in various applications, including: wafer spin and spray coating, chip-to-wafer bonding, wafer-to-wafer permanent bonding, temporary debonding and wafer cleaning. Endeavors will focus on coating thickness and uniformity control, bonding alignment accuracy control, impact of wafer characteristics on the bonding process and yield, bonding interface evaluation (e.g., Cu-Cu, Cu-Sn, Al-Al), process time optimization and material qualification evaluation on adhesives for temporary bonding, photoresist and permanent bonding. In addition, as part of the agreement, EVG will provide IME with process engineering support and access to its demo lab in Austria, while IME will serve as a process hub for EVG's Asia-Pacific customer base.

"As part of IME's commitment to accelerate the research and development toward 3D IC, we are continually working with equipment companies to fulfill our process technology objectives," said Dr. Patrick Lo, deputy executive director. "EV Group has provided IME with strong technology support to expand our research and development capabilities. The flexibility of their systems and the process expertise that EVG's team demonstrated enables us to ramp quickly and scale seamlessly. We look forward to leveraging this partnership, and to continue bringing the advantages of 3D IC development capabilities to our customers."

Commenting on today's news, EVG corporate technology development & IP director, Markus Wimplinger, noted, "IME is one of the world's leading R&D centers making significant inroads in 3D IC integration, particularly through its work with the 3D Through Silicon Via Consortium. We are thrilled at the opportunity to work closely with this important research institute, which is really taking a lead to boost the research and development of 3D ICs on a global scale. This partnership with IME represents another step forward for EV Group in 3D IC research and development, and significantly expands our reach and presence in the Asia-Pacific region."

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

The Agency for Science, Technology and Research (A\*STAR) is the lead agency for fostering world-class scientific research and talent for a vibrant knowledge-based and innovation-driven Singapore. A\*STAR oversees 14 biomedical sciences, and physical sciences and engineering research institutes, and nine consortia & centre, which are located in Biopolis and Fusionopolis, as well as their immediate vicinity.

A\*STAR supports Singapore's key economic clusters by providing intellectual, human and industrial capital to its partners in industry. It also supports extramural research in the universities, hospitals, research centres, and with other local and international partners.

For more information about A\*STAR, please visit [www.a-star.edu.sg](http://www.a-star.edu.sg).

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**About the Institute of Microelectronics (IME)**

The Institute of Microelectronics (IME) is a research institute of the Science and Engineering Research Council 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 integrated circuits design, advanced packaging, bioelectronics and medical devices, MEMS, nanoelectronics, and Silicon photonics.

For more information, visit IME on the Internet: <http://www.ime.a-star.edu.sg>.

**About EV Group**

EV Group (EVG) is a world leader in wafer-processing solutions for semiconductor, MEMS and nanotechnology applications. Through close collaboration with its global customers, the company implements its flexible manufacturing model to develop reliable, high-quality, low-cost-of-ownership systems that are easily integrated into customers' fab lines. Key products include wafer bonding, lithography/nanoimprint lithography (NIL) and metrology equipment, as well as photoresist coaters, cleaners and inspection systems.

Founded in 1980, EVG is headquartered in St. Florian, Austria, and operates via a global customer support network, with subsidiaries in Tempe, Ariz.; Albany, N.Y.; Yokohama and Fukuoka, Japan; Seoul, Korea and Chung-Li, Taiwan. The company's unique Triple i-approach (invent - innovate - implement) is supported by a vertical integration, allowing EVG to respond quickly to new technology developments, apply the technology to manufacturing challenges and expedite device manufacturing in high volume.

More information is available at [www.EVGroup.com](http://www.EVGroup.com).

**EV Group Contacts:**

Clemens Schütte  
Director, Marketing and Communications  
EV Group  
Tel: +43 7712 5311 0  
E-mail: [Marketing@EVGroup.com](mailto:Marketing@EVGroup.com)

**IME Contact:**

Lim Kheng Hwee  
Industry Development  
Institute of Microelectronics  
DID: +65-6770 5316  
E-mail: [limkh@ime.a-star.edu.sg](mailto:limkh@ime.a-star.edu.sg)

Karen Do  
Account Manager  
MCA, Inc.  
Tel: +1-650-968-8900, ext. 108  
E-mail: [kdo@mcapr.com](mailto:kdo@mcapr.com)