



ASE expands System-in-Package business model through industry partnership with Inotera

Broader SiP portfolio to meet growth momentum across a broad range of end markets.

Taipei, April 07, 2014 — Advanced Semiconductor Engineering, Inc. (TAIEX: 2311, NYSE: ASX), the world's largest semiconductor assembly and test service provider, today announced a joint development with Inotera Memories, Inc. (TAIEX: 3474), a leading DRAM wafer foundry, in a move to further strengthen ASE's System-in-Package (SiP) capabilities. Complementing ASE's established portfolio, Inotera will provide manufacturing services for silicon interposer, an interconnect device on silicon wafer for 2.5D IC solutions. This collaborative business model, combining Inotera's strong front-end wafer processing capability with ASE's advanced IC packaging and testing technology, will serve to deliver solutions featuring high quality, stable yield and an efficient cost structure, to a broader customer base and market.

Semiconductor is playing a significant role in enabling the stark sophistication evolving within today's vast technology landscape. However, semiconductor evolution is being faced with serious challenges, including the industry need for higher performance and bandwidth, lower power, and increased efficiency. Continuously rising costs are also affecting technology adoption and market growth.

According to Gartner, the PC and Server space is experiencing slow down, hence applications driving market growth through 2017 are to be found in the ultra-mobile PC, tablet, smartphone and emerging Internet of Things (IOT) sectors. Chip makers supplying to these segments are progressively required to integrate increased functionality within smaller form factors, therefore enabling products to be faster and smarter. IC manufacturing is playing a larger role within the supply chain and is seeking optimum improvement in regard to process and production.

ASE is continuously exploring and developing new technologies in package design and manufacturing, particularly advanced IC technologies such as 2.5D ICs and 3D ICs, to address market needs within the fast moving mobility space. Essentially, SiP is a module containing an electronic system or subsystems that utilize such 2.5/3D IC packaging technologies to miniaturize the package. Together with ASE's electronic manufacturing services (EMS) subsidiary, Universal Scientific Industrial (USI), ASE is offering customers a complete SiP solution, encompassing design to manufacturing to logistical integration. SiP technology is integral to many end market applications including products incorporating biometric touch, sensors, wireless, power management, camera modules, RF front end and lighting, all of which are prevalent within today's vast technology landscape.

"Inotera hopes to contribute our high-quality and cost-effective manufacturing capability to ASE's SiP solution through the collaboration," said Dr. Scott Meikle, President of Inotera. "By combining strengths complementary and maintaining a full commitment to our DRAM capacity, Inotera and ASE can provide an enabling capability to the semiconductor supply chain," emphasized Dr. Meikle.

"ASE recognizes that collaboration within the supply chain is critical to the success of our vision for system integration, and it is through the establishment of strong partnerships that we can work together to bring optimum value and just-in-time solutions to our customers," said Dr Tien Wu, Chief Operating Officer, ASE Group.

He continued, "Inotera is a proven leader in DRAM wafer fab technology and has expanded their capabilities to offer silicon interposer foundry services to benefit ASE's complete SiP solution. ASE's

dedicated R&D team is developing proprietary IC packaging IPs, working with various material and equipment suppliers, as well as customers to further expand and strengthen our SiP portfolio."

About Inotera Memories

Inotera Memories, Inc. was incorporated on January 23rd, 2003. Inotera's production facilities are designed to manufacture high-density and high-performance DRAM (Dynamic Random Access Memory) products using state-of-the-art technology. The combination of world-leading technology transferred from its technology partners and local cost-efficiency in mass production has resulted in an innovative company that is highly productive, highly competitive and at the leading edge in the DRAM industry. For more information, please visit Inotera's IR Website: http://ir.inotera.com

About The ASE Group

The ASE Group is the world's largest provider of independent semiconductor manufacturing services in assembly, test, materials and design manufacturing. As a global leader geared towards meeting the industry's ever growing needs for faster, smaller and higher performance chips, the Group develops and offers a wide portfolio of technology and solutions including IC test program design, front-end engineering test, wafer probe, wafer bump, substrate design and supply, wafer level package, flip chip, system-in-package, final test and electronic manufacturing services through Universal Scientific Industrial Co Ltd, a member of the ASE Group. The Group generated sales revenues of US\$7.4 billion in 2013 and employs over 60,000 people worldwide. For more information about the ASE Group, visit www.aseglobal.com.

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