Ansys Multiphysics Solutions Certified By TSMC For High-Speed Next-Generation 3D-IC Packaging Technologies

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TSMC leverages Ansys' multiphysics platform to analyze power, thermal and signal integrity for its CoWoS® and InFO technologies

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Key Highlights

- Ansys achieved certification of its advanced semiconductor design solution for TSMC's high-speed CoWoS® (Chip-on-Wafer-on-Substrate) and InFO (Integrated Fan-Out) 2.5D and 3D advanced packaging technologies
- Ansys' comprehensive suite of power, thermal and signal integrity analysis engines simulate, calculate and alleviate reliability issues, enabling optimal electrical performance

Ansys (NASDAQ: ANSS) achieved certification of its advanced semiconductor design solution for TSMC's high-speed CoWoS® with silicon interposer (CoWoS®-S) and InFO with RDL interconnect (InFO-R) advanced packaging technologies. This empowers customers to signoff power, signal integrity and analyze the impact of thermal effects to confirm the reliability of complete, integrated 2.5D and 3D silicon systems.

TSMC certifies the Ansys® RedHawk™ and Ansys® RaptorH™ family of multiphysics solutions – including Ansys® Redhawk-SC Electrothermal™ – for next-generation CoWoS®-S and InFO-R advanced packaging technologies. The certification encompasses die and package co-simulation and co-analysis for extraction, power and signal integrity analysis, power and signal electromigration (EM) analysis and thermal analysis. This comprehensive suite of power, thermal, signal integrity and EM analysis tools will help simulate, calculate and alleviate reliability issues, enabling optimal electrical performance.

"The result of our collaboration combining Ansys' multiphysics solutions and TSMC's CoWoS® and InFO advanced packaging technologies helps our mutual customers address their design complexity and challenges," said Suk Lee, senior director of the Design Infrastructure Management Division at TSMC. "Through our ongoing partnership with Ansys, customers can improve and validate their cutting-edge designs to satisfy stringent performance and reliability standards."

"To meet demanding reliability requirements for Wi-Fi systems, 5G mobile devices and high-speed wireless components, customers require a comprehensive multiphysics simulation solution that addresses power, reliability, and thermal issues across the entire chip, package and system," said John Lee, vice president and general manager, Ansys. "Collaborating with TSMC, our mutual customers will circumvent these challenges, enable first-time design success and expedite time to market with our leading-edge multiphysics simulation platform."

About Ansys

If you've ever seen a rocket launch, flown on an airplane, driven a car, used a computer, touched a mobile device, crossed a bridge or put on wearable technology, chances are you've used a product where Ansys software played a critical role in its creation. Ansys is the global leader in engineering simulation. Through our strategy of Pervasive Engineering Simulation, we help the world's most innovative companies deliver radically better products to their customers. By offering the best and broadest portfolio of engineering simulation software, we help them solve the most complex design challenges and create products limited only by imagination. Founded in 1970, Ansys is headquartered south of Pittsburgh, Pennsylvania, U.S.A. Visit www.ansys.com for more information.

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