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Resonac Plans to Establish Semiconductor Back End Process R&D Center in Silicon Valley

~ Resonac aims to accelerate development of cutting-edge technologies in a region where business bases of GAFAM and US semiconductor manufacturers are concentrated ~

Today, Resonac Corporation (President: Hidehito Takahashi, hereinafter "Resonac") announces that it plans to establish a research and development center for semiconductor packaging technologies and semiconductor materials in Silicon Valley, California, the USA. Resonac has started to investigate, select, and prepare facilities to be installed in the new R&D center.

While the global semiconductor market is projected to exceed US\$1 trillion by 2030, the evolution of AI technologies, including Generative AI which has been rapidly expanding throughout this year, is accelerating. Many cutting-edge semiconductor technologies supporting this trend have originated from Silicon Valley, where prominent US semiconductor manufacturers, such as Intel and NVIDIA, are concentrated. Additionally, in recent years, GAFAM*, which deploy cloud services including Generative AI services, are known to develop AI semiconductors optimized for their own services.

In this context, Resonac has commenced preparations to establish the new Packaging Solution Center (PSC), which is a research and development center for advanced semiconductor packaging material technologies, in Silicon Valley, where key figures in development of semiconductor technology concepts gather. The first PSC of Resonac, which is located in Shin-Kawasaki, Japan and has proven track record, is equipped with state-of-the-art facilities which can process large-sized materials such as 300mm wafer and 500mm square panel. These facilities are capable of laser dicing, fine wiring formation, and handling processes and materials for cutting-edge technologies like 2.xD and 3D semiconductor packaging. Thus, the first PSC of Resonac has been serving as a one-stop hub for trial implementation and evaluation of leading-edge production technologies and materials, and attracting attention of global players in the semiconductor manufacturing industry. This year, the first PSC has already received visits from more than 150 companies worldwide. To expand such activities, Resonac decided this time to establish the new PSC in the United States. Resonac plans to capture real-time trends and the latest concepts in packaging technology for cutting-edge semiconductors including AI semiconductors, and reflect them in the development of new materials.

We are currently investigating and preparing the equipment to be introduced, and plan to begin operation in 2025 after installing a clean room and equipment.

*GAFAM : Google • Apple • Facebook • Amazon • Microsoft

[About the Resonac Group]

The Resonac Group is a new company established as a result of the integration of the Showa Denko Group and the Showa Denko Materials Group (former Hitachi Chemical Group) in January 2023. The Group's annual sales of semiconductor and electronic materials amount

to about 400 billion yen, accounting for about 30% of the Group's annual net sales. The Group especially has global top share of semiconductor materials for packaging process. The integration of the two companies has enabled the Resonac Group to design functions of materials as well as to develop them in-house, going all the way back to raw materials. The new trade name "RESONAC" was created as a combination of two English words, namely, the word of "RESONATE" and "C" as the first letter of CHEMISTRY. The Resonac Group will make the most of its co-creative platform, and accelerate technological innovation with semiconductor manufacturers, material manufacturers, and equipment manufacturers inside and outside Japan.

For detail, please refer to our Website.

Resonac Holdings Corporation: [https:// www.resonac.com/](https://www.resonac.com/)

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